



MUBADALA

Annual Review 2018



Mubadala Investment Company

Uniquely Mubadala

Mubadala Investment Company

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Mubadala is a global investment company generating sustainable financial returns for Abu Dhabi by actively investing in sectors that build on its competitive advantages of talent, portfolio diversity, financial strength and global partnerships.

# Our History

The late Sheikh Zayed bin Sultan Al Nahyan championed the establishment of a progressive governmental structure and channeled newfound oil resources, towards the creation of critical infrastructure, such as hospitals and universities, for generations to come.

## 1984

Established in 1984, International Petroleum Investment Company (IPIC) was created to advance Abu Dhabi's natural petroleum wealth for the development of the emirate.

## 2002

Mubadala Development Company followed in 2002 to further diversify the economy. Both swiftly flourished into active worldwide investors across multiple sectors.

## 2007

Abu Dhabi Investment Council starts operations. Responsible for investing part of the Government's financial surplus.

## 2017

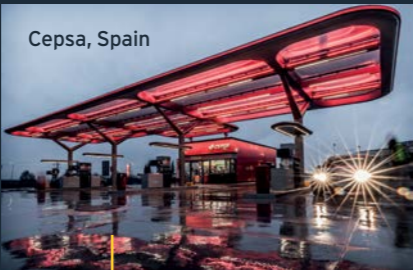
Expanding this visionary heritage of excellence, Mubadala Investment Company was created in 2017 as a global investment powerhouse for Abu Dhabi.

## 2018



Yahsat, UAE

**January**  
Yahsat launched Al Yah 3 – its third satellite – and expanded its k-band coverage to an additional 19 markets in Africa and marks the company's entry into the Brazilian market.



Cepsa, Spain

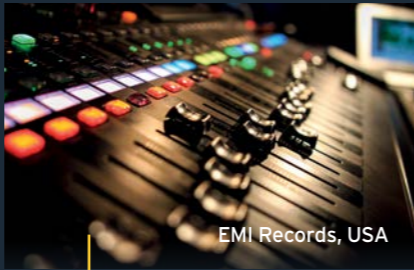
**February**  
The Abu Dhabi National Oil Company (ADNOC) signed an agreement with Cepsa, awarding it a 20 percent stake in Abu Dhabi's offshore concession.



Abu Dhabi Investment Council, UAE

**March**  
Abu Dhabi Investment Council became part of the Mubadala group, adding significant scale to the portfolio and creating synergies.

**April**  
At the Global Aerospace Summit, Strata announced its first contracted statement of work for the 777X program for to Boeing Commercial Airplanes.



EMI Records, USA

**May**  
Mubadala sold its 60 percent stake in EMI Music Publishing to Sony for US \$4.75 billion.



Emirates Global Aluminium

**June**  
Emirates Global Aluminium (EGA), received its first shipment of bauxite ore in preparation for the commissioning of its under-construction Al Taweelah alumina refinery. The shipment sailed from the Republic of Guinea.

Mubadala Ventures will manage a US \$400 million fund to invest in leading European technology companies. In partnership with SoftBank Group, the fund will target founder-led, high growth technology companies.

Mubadala together with AMEERA Capital Management LLC – the current owners of Andromeda Group – agreed to acquire majority stakes in two European fish farming companies: Nireus SA and Selonda SA.



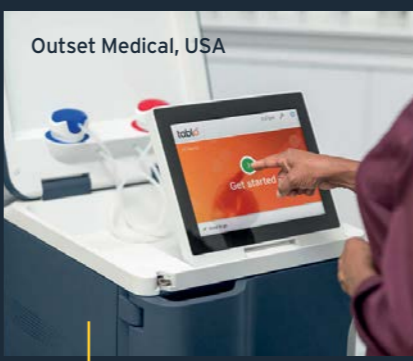
Lonza, Switzerland



Borealis, Austria

**July**  
Mubadala, through its assets companies, is playing an active role in eliminating pollution caused by plastics with Borealis playing a pivotal role in environmental causes, such as Project STOP.

Multidisciplinary teams of surgeons at Cleveland Clinic Abu Dhabi performed multiple transplant surgeries from a deceased donor on the same day, including the UAE's first double-lung transplant.



Outset Medical, USA

**August**  
Mubadala invested in Outset Medical, a Silicon Valley-based medtech company delivering first-of-its-kind technology into the growing US \$15 billion global dialysis market.

Yahsat completed the acquisition of the UAE's first home grown satellite operator, Thuraya, set to significantly expand Yahsat's current satellite solutions portfolio on both commercial and government fronts.

## September

Mubadala opens an office in San Francisco, its first office in the U.S. for its Venture Capital business overseeing early growth investments and managing the SoftBank Vision Fund partnerships.

## November

Injazat partnered with the Ministry of Interior to launch Hassantuk providing state-of-the-art alarm connectivity to building fire and life safety systems across Abu Dhabi.



Virgin Galactic, USA

## December

Virgin Galactic reached orbit successfully on its first spaceflight vehicle built for commercial and passenger service with two astronaut pilots onboard.

# Abu Dhabi's investment ties to the world



Under the guidance of His Highness Sheikh Khalifa bin Zayed Al Nahyan, President of the UAE and Ruler of Abu Dhabi, Mubadala continues to perform a critical role as we advance as a nation.

In 2018 - the Year of Zayed - in which the country celebrated his vision of a diversified future, it was fitting that the Abu Dhabi Investment Council (ADIC) joined the Mubadala family.

Since its inception in 2007, ADIC has deepened Abu Dhabi's investment ties to the world and supported pillars of our economy. It now adds significant scale to the Mubadala Investment Company portfolio.

With all elements of Mubadala Investment Company aligned behind a unified strategy, the UAE has a future focused strategic investor that will continue delivering against Sheikh Zayed's vision as our country looks to strengthen its role in the next global community for generations to come.

Building from its foundations in energy, Mubadala has differentiated itself with valued investments at home and globally across diversified sectors including healthcare, infrastructure, advanced manufacturing and aerospace.

This evolutionary progress will continue in the years ahead as Mubadala continues to deliver against its mandate and to reflect our ambitions as a nation. As part of that evolution the company has set in motion investments and initiatives that will see the UAE realize its potential as a global leader and hub for innovation and technology.

Mubadala's historic and future success is dependent on its single most important asset - its people. It is therefore important to take this opportunity to recognize and thank all of our staff for their efforts in making 2018 one of such significant continued progress for the company.

**His Highness Sheikh Mohamed bin Zayed Al Nahyan**  
Crown Prince of Abu Dhabi, Deputy Supreme Commander of the UAE Armed Forces and Chairman of Mubadala Investment Company

"With all elements of Mubadala Investment Company aligned behind a unified strategy, the UAE has a future focused strategic investor that will continue delivering against Sheikh Zayed's vision as our country looks to strengthen its role in the next global community for generations to come."

# A global investor of significant scale

Mubadala today is a reflection of how far we've come as a nation since 1971. Our founding father, the late Sheikh Zayed bin Sultan Al Nahyan, set a vision for the UAE. Our natural hydrocarbon resources, coupled with his foresight, have enabled the nation to pursue an extremely ambitious diversification strategy.

This has resulted in one of the world's most advanced levels of infrastructure.

Our airlines and seaports connect the world. Our stable government, open markets and trading heritage make us a hub for industry, finance, media and technology.

Mubadala is successfully operating as a global investor of significant scale, focused on delivering sustainable financial returns to realize a vision for a globally integrated and diversified economy.

The addition of the Abu Dhabi Investment Council to the Mubadala group amplifies our reach and impact. We now have investments and partnerships across multiple sectors in more than 50 countries. We have offices in Rio De Janeiro, Hong Kong, Moscow, New York and San Francisco.

This growth will continue and importantly gives us the presence to expand across sectors and markets that are strategically significant to our diversified global business.

In particular, Mubadala will build on its track record as an influential global technology investor and support the emergence of Abu Dhabi as a vibrant hub for technology investment and innovation for the MENA region and beyond.

**His Highness Sheikh Mansour bin Zayed Al Nahyan**  
Deputy Prime Minister and Minister of Presidential Affairs of the United Arab Emirates. Vice-Chairman of Mubadala Investment Company

“Mubadala is successfully operating as a global investor of significant scale, focused on delivering sustainable financial returns to realize a vision for a globally integrated and diversified economy.”



# Committed to the highest standards of governance

The Board of Directors is responsible for Mubadala's strategic direction, oversight and corporate governance, ensuring the business delivers on the government of Abu Dhabi's development and diversification priorities. As a state-owned enterprise working at the forefront of Abu Dhabi's efforts to drive economic growth across multiple sectors, Mubadala benefits from the long-term support of its sole shareholder, the government of Abu Dhabi. The Mubadala Board of Directors annually reviews and approves the company's strategic direction and business plans on behalf of the government of Abu Dhabi.

**His Highness Sheikh Mohamed bin Zayed Al Nahyan**  
Crown Prince of Abu Dhabi, Deputy Supreme Commander of the UAE Armed Forces and Chairman of Mubadala Investment Company

His Highness Sheikh Mohamed bin Zayed Al Nahyan holds a wide range of policy, legislative and economic responsibilities in Abu Dhabi and the United Arab Emirates.

His Highness is the Crown Prince of Abu Dhabi since November 2004, and was appointed Deputy Supreme Commander of the UAE Armed Forces in January 2005. His Highness is also Vice Chairman of the Abu Dhabi Supreme Petroleum Council.



**His Highness Sheikh Mansour bin Zayed Al Nahyan**  
Deputy Prime Minister and Minister of Presidential Affairs of the United Arab Emirates. Vice-Chairman of Mubadala Investment Company

His Highness Sheikh Mansour bin Zayed Al Nahyan is the Deputy Prime Minister of the United Arab Emirates and Minister of Presidential Affairs.

His Highness is also the Chairman of the Ministerial Council for Services, the Emirates Investment Authority and Abu Dhabi Fund for Development. He sits on the Supreme Petroleum Council and on the boards of numerous investment institutions.



**His Excellency Mohammed Ahmed Al Bowardi**  
Minister of State for Defence Affairs Member

His Excellency Mohammed Ahmed Al Bowardi is the UAE Minister of State for Defence Affairs. He also holds several prominent positions in the Emirate of Abu Dhabi. His Excellency is Vice Chairman of Dolphin Energy and a board member of Tawazun Holding.

His Excellency is also the Managing Director of the Abu Dhabi Environment Agency, Deputy Chairman of the Mohamed Bin Zayed Species Conservation Fund and the International Fund for Houbara Conservation - Abu Dhabi. His Excellency is also a member of the Board of Trustees of Abu Dhabi University (ADU).



**His Excellency Suhail Mohamed Faraj Al Mazrouei**  
UAE Minister of Energy & Industry Member

His Excellency Suhail Mohamed Faraj Al Mazrouei was appointed as UAE Minister of Energy & Industry in 2013.

His Excellency has held multiple positions in both government and the private sector. He is currently the Chairman of the Federal Electricity and Water Authority, Vice-Chairman of the Emirates Nuclear Energy Corporation (ENEC), Board Vice-Chairman of Barakah One Company and Board Vice-Chairman of Nawah Energy Company. He is a member of the Abu Dhabi Supreme Petroleum Council and a member of the Board of Directors of the Dolphin Energy Company. He is also member of Mubadala Investment Company's Board Executive Committee and Audit, Risk & Compliance Committee.



**Abdulhamid Mohammed Saeed**  
Member

Abdulhamid Saeed is Group Chief Executive Officer of First Abu Dhabi Bank, managing director of Reem Investments, and a member of the Board of Directors for Sky News Arabia. He is a member of Mubadala Investment Company's Board Executive Committee and Audit, Risk & Compliance Committee.

Mr. Saeed previously held various key positions at Citibank and has more than 35 years of experience in the financial and banking sectors.



**Mahmood Ebraheem Al Mahmood**  
Member

Mahmood Ebraheem Al Mahmood is Chief Executive Officer of ADS Holding, a privately held, Abu Dhabi-based financial services firm, and Executive Chairman of ADS Securities, a foreign exchange and commodities trading platform. He is also a board member of Al Etihad Credit bureau.

Mr. Al Mahmood has held senior roles at a number of companies including the Abu Dhabi Investment Authority (ADIA), and was also Chief Executive Officer, Managing Director and a board member of the development and investment company Al Qudra Holdings.



**His Excellency Khaldoon Khalifa Al Mubarak**  
Group Chief Executive Officer & Managing Director

Khaldoon Khalifa Al Mubarak is Managing Director and Group Chief Executive Officer of Mubadala Investment Company. In this position he is responsible for ensuring the company's strategy is aligned to Abu Dhabi's objective of advancing its globally integrated, sustainable and diversified economy.

Government responsibilities include: Member of the Abu Dhabi Executive Council; Presidential Special Envoy to China; Chairman of the Abu Dhabi Executive Affairs Authority, which provides strategic policy advice to the Chairman of the Abu Dhabi Executive Council, and membership of the UAE Supreme Petroleum Council.

Khaldoon serves on the Boards of a number of significant businesses, including Chairmanships of Emirates Nuclear Energy Corporation, Emirates Global Aluminium and City Football Group. He is also a non-Executive Board member of First Abu Dhabi Bank.

Khaldoon Co-Chairs the Abu Dhabi-Singapore Joint Forum and is a member of the New York University Board of Trustees.

# Deploying capital globally and at scale

2018 was the year we galvanized the Group around a central mission to deliver risk-adjusted returns for our shareholder and advance Abu Dhabi’s position across sectors that will shape our future.

Our increased scale and diversification as Mubadala Investment Company enabled us to deliver strong financial and operational performance, despite global macroeconomic uncertainties.

During the year, we welcomed the Abu Dhabi Investment Council, led by Chief Executive Officer, Eissa Al Suwaidi, to the Mubadala family. This move has significantly increased our local and global presence. It also enabled us to create synergies and explore new opportunities, particularly in the financial services sector.

Across our four global business platforms, we continued to deploy capital at scale while managing risk and protecting downside. We successfully monetized several mature holdings and established critical new partnerships, and we expanded into new sectors and markets.

As a Group, our core strengths are our long-term perspective, our talent, our scale and our network of global partnerships. We combine these strengths with the appetite and experience to leverage opportunities arising from disruption and innovation across our entire portfolio.

Our new global offices demonstrated immense value, as we get geographically closer to assets and opportunities in key markets.

2018 was also a year where we set out our ambitions to be a world-leading technology and innovation investor.

In addition to our participation in the SoftBank Vision Fund, we launched a new Mubadala Ventures \$400 million tech fund, which will target founder-led and high-growth UK and European tech companies. Our goal is to make Abu Dhabi a technology hub within the global ecosystem.

Delivering on our mandate would not be possible without the direction of our dedicated Board of Directors, the commitment of our shareholder, our business partners and our employees across the Group as we continue to contribute to the success of the United Arab Emirates.

I want to thank everyone for making it possible for Mubadala to be a transformational investor for Abu Dhabi.

**Khaldoon Khalifa Al Mubarak**  
Group CEO & Managing Director



**EXPLORE MORE:**

Khaldoon shares his thoughts on Mubadala’s performance and investment approach on [mubadala.com/annual-review-2018/en/leadership](https://mubadala.com/annual-review-2018/en/leadership)

“Across our four global business platforms, we continued to deploy capital at scale while managing risk and protecting downside.”

**Khaldoon Khalifa Al Mubarak**  
Group CEO & Managing Director



**Our Values**

Our values are at the core of everything we do at Mubadala. They shape our corporate culture and define the character of our organization.

Externally, our values serve as a benchmark for aligning with like-minded business partners who share our commitment to best-in-class corporate governance, ethics and best-in-class standards.

Our people live by the values of Accountability, Inspiration, Integrity and Partnership. Internally, these values define exemplary behavior that is celebrated through our employee recognition program, and are used to measure employee performance.



**Accountability**

We take responsibility for everything we say and do



**Inspiration**

We are motivated to make a difference



**Integrity**

We strive to do what is right even when it is hard



**Partnership**

We achieve more together

# Investment Committee

The Investment Committee is responsible to the Board for developing and monitoring Mubadala’s investment strategy, for the overall performance of Mubadala and for managing Mubadala’s business, as defined by the Investment Committee Charter.

### Ensuring accountability for our mandate

The Investment Committee is comprised of the Group Chief Executive Officer and Managing Director, Deputy Group CEO and Chief Corporate & Human Capital Officer, Chief Financial Officer, Chief Legal Officer, Chief Strategy & Risk Officer, and Executive Director, Mubadala Capital.

In addition, the four platform CEOs are also members of the Investment Committee, ensuring alignment and synergies across all the sectors in which Mubadala operates.

### Investment Committee Members

1. Khaled Abdulla Al Qubaisi, Chief Executive Officer, Aerospace, Renewables & ICT

2. Samer Halawa, Chief Legal Officer

3. Ahmed Saeed Al Calily, Chief Strategy & Risk Officer

4. Khaldoon Khalifa Al Mubarak, Group Chief Executive Officer & Managing Director

5. Hani Barhoush, Executive Director, Mubadala Capital

6. Homaid Al Shimmari, Deputy Group CEO and Chief Corporate & Human Capital Officer

7. Ahmed Yahia Al Idrissi, Chief Executive Officer, Technology, Manufacturing & Mining

8. Waleed Al Mokarrab Al Muhairi, Deputy Group CEO and Chief Executive Officer, Alternative Investments & Infrastructure

9. Musabbeh Al Kaabi, Chief Executive Officer, Petroleum & Petrochemicals

10. Carlos Obeid, Chief Financial Officer



# Creating sustainable financial returns with a diversified portfolio

Mubadala is a global investment company owned by the Government of Abu Dhabi.

Our five-year strategy is to grow and manage a resilient and diversified portfolio with a mandate to create sustainable financial returns, furthering our shareholder's strategic objective of a globally integrated and diversified economy.

In 2018, we witnessed many challenges: strong market volatility; high valuations compared to historical norms despite weakening business confidence; rising risk of trade wars as protectionist rhetoric grew stronger; rising cost of borrowing due to a strengthening dollar; and jittery markets rounding off the year.

Our investment teams have addressed these challenges via their diligent approach to deal selection and asset management. Leveraging our global network of partners and staying the course in the face of temporary turbulences – all while remaining prudent and cognisant of risks – has led to continued success.

We remain committed to the growth and management of a resilient and diversified portfolio for our shareholder, and we continue to achieve this by:

- **Strengthening our portfolio's performance** – we remain focused on extracting value from our existing assets, driving for enhancements in yield and returns. We also strive to continue improving and increasing the resilience of the portfolio in case of possible future downturns, monetizing investments as and when appropriate.
- **Deploying capital for growth** – by prudently deploying capital in sectors we already have a presence in, and entering new sectors with attractive return profiles and healthy outlooks, we aim to continue guiding the portfolio towards sustainable and resilient returns.

Previously identified core themes continue to be relevant to our investment decisions and are drivers of growth in sectors deemed to be attractive:

- **Demographic changes** – as the global population undergoes structural changes in age and wealth that create new investment opportunities.
- **Resource scarcity** – as the depletion of natural resources results in a need to ensure existing and new supplies.
- **Urbanization** – as rapid urban growth drives infrastructure requirements.
- **Technology & innovation** – as innovation enables new industries and disrupts traditional ones.

## Abu Dhabi Investment Council

joined the Mubadala Investment Company group in 2018, creating one of the world's largest global investment companies.

London Array, UK



Turbine Services & Solutions, UAE



Mubadala Petroleum, Thailand



Lonza, Switzerland



# A global investor well positioned to drive financial returns

Message from Carlos Obeid, Group CFO, Mubadala Investment Company

Mubadala is a globally competitive investor well-positioned to drive financial returns, and strategic value for Abu Dhabi, towards a vision for a globally connected and future-focused economic base.

2018 was a year where the Group's scale, diversification and stable cash flows resulted in solid financial and operational performance, despite the market volatility of Q4 '18.

We recorded a Total Comprehensive Income of AED 12.5 billion, an increase of 21% year on year.

Our Assets Under Management increased to AED 841 billion with the addition of Abu Dhabi Investment Council into the Group. This consolidates our position as an active global investor. Investments in the US, Europe, Asia and emerging markets underline Mubadala's willingness to invest and seek returns in a broad range of geographies and asset classes.

In total, AED 70.1 billion was deployed across existing sectors including technology, aerospace, commodities and financial services, along with first investments into pharmaceuticals, medical technology and agribusiness. Mubadala's strategy to diversify its investments is demonstrated by the redeployment of capital across our portfolio.

“Despite a year of challenging market conditions with volatile equities and uncertain yields, the group’s scale, diversification and stable cash flows delivered solid financial and operational performance in 2018.”

**Carlos Obeid**  
Chief Financial Officer



Across the Group we actively manage our portfolio, optimizing our investments through the lifecycle of an asset and divesting when opportunities arise for monetization at the right time and valuation.

Several mature assets, both locally and abroad were monetized at strong valuations for a total of AED 55.4 billion, with the proceeds deployed across priority sectors.

While we invested in new sectors and asset classes, we remain focused on robust balance sheet management, maintaining a low leverage position and managing risk across the business.

In line with Mubadala's investment philosophy evolution and with ADIC now part of the Group, the company will provide relevant guidance on performance over time, based on multi-year benchmarks.

**Carlos Obeid**  
Chief Financial Officer

## Highlights of 2018

Assets Under Management  
**AED 841B**  
(US \$229B)

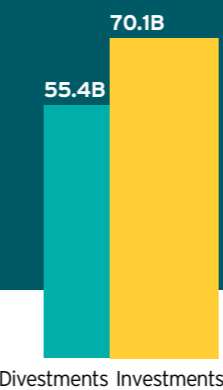


Total Comprehensive Income  
**AED 12.5B**  
(US \$3.4B)



Divestments  
**AED 55.4B**  
(US \$15B)

Investments  
**AED 70.1B**  
(US \$19B)



The issuing entity has the following credit ratings\*

Credit ratings: short-term  
**P-1/A-1+/F1+**  
Moody's/Standard & Poor's/Fitch

Credit ratings: long-term  
**Aa2/AA/AA**  
Moody's/Standard & Poor's/Fitch

\*Mamoura Diversified Global Holding PJSC.

# Abu Dhabi Investment Council

## Planning for the third-largest financial institution in the UAE underway

Planning for the integration of Abu Dhabi Commercial Bank (ADCB), Al Hilal Bank and Union National Bank (UNB) commenced in 2018. With AED 423 billion in assets, the combined entity will be the third-largest financial institution and one of the largest retail lenders in the UAE, accounting for a 21 percent market share of retail loans as at 31 December 2018.



## Aerospace, Renewables & ICT

### US \$1.6B

Masdar signed a refinancing agreement worth £1.27 billion (US\$1.6 billion) with Equinor and China Resources Group for its 402-megawatt (MW) Dudgeon wind farm.

### Boeing 777X

Strata Manufacturing awarded Boeing 777X composite aero-structures contract. This is the fourth work package that Boeing has awarded to Strata since 2013.

### Satellite launch

Yahsat's third satellite - Al Yah 3 - launched, expanding commercial services to 19 additional markets across Africa and bringing high-speed broadband to Brazil.

### Čibuk 1 milestone

A partnership between Masdar, Taaleri Energia and DEG, the largest utility-scale wind project in Serbia, Čibuk 1, has passed several key milestones and will achieve commercial operation in Q3 2019.



## Alternative Investments & Infrastructure

### 70-100 investments

Mubadala has made 70-100 investments in technology firms through the SoftBank Vision Fund following its US \$15 billion commitment in 2017.

### US \$4.75B

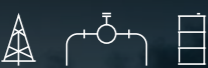
Sony Corporation acquired Mubadala's 60% remaining stake in EMI Music Publishing at an enterprise value of US \$4.75 billion, generating \$2.3 billion in value.

### US \$400M fund

Mubadala created a US \$400 million fund managed by Mubadala Ventures to invest in leading European technology companies.

### 35 organ transplants

By the end of 2018, Cleveland Clinic Abu Dhabi conducted 35 transplant operations, a significant achievement for an academic medical center in its first three years of operations.



## Petroleum & Petrochemicals

### 10% stake

Mubadala Petroleum acquired a minority stake from Eni in the Shorouk offshore concession in Egypt, which contains Zohr - the largest gas field in the Mediterranean.

### Gazprom Neft

Gazprom Neft, Mubadala Petroleum and the Russian Direct Investment Fund (RDIF) established a joint venture to develop oil fields in the Tomsk and Omsk regions of Western Siberia.

### 20% stakes

ADNOC awards both Cepsa and OMV 20% stakes in Abu Dhabi's offshore Sateh Al Razboot (SARB) and Umm Lulu concession which are among the world's 20 largest oil fields in production.

### US \$2B

NOVA Chemicals JV with Borealis formed Novealis Holdings LLC, which has partnered with Total to create Bayport Polymers.



## Technology, Manufacturing & Mining

### US \$425M

Mubadala sold 22 million common equity shares in AMD for US \$425 million. AMD ended 2018 as the top-performing stock on the S&P 500, according to MarketWatch.

### 75% completion

Emirates Global Aluminium announced that its bauxite-mining project in the Republic of Guinea has reached 75% construction completion.

### 61,000 tons

Al Taweelah alumina refinery received its first bauxite shipment of c. 61,000 tons in June.

### US \$132M

Mubadala led a Series D equity financing for US-based medical technology company Outset Medical.

# Abu Dhabi Investment Council joins Mubadala

The Abu Dhabi Investment Council (ADIC) is a strategic fund that was established by the Government of Abu Dhabi in 2007.

It is managed on a model similar to endowment investing; meaning that it is focused more on private assets; its investment strategy is similar to the major endowments' model of investing and its business performance is benchmarked to the market. In 2018, ADIC joined the Mubadala Group, with Eissa Al Suwaidi, CEO of ADIC, reporting directly to the Mubadala Group CEO and Managing Director, Khaldoon Khalifa Al Mubarak.

ADIC joining the Group has grown and diversified Mubadala's investment portfolio worldwide. The synergies and efficiencies that have resulted are already unlocking new opportunities, particularly within the financial services sector.

Since its inception, ADIC's global investment strategy has been to pursue superior risk-adjusted returns across the entire capital structure, from global illiquid private to liquid public asset classes while preserving capital. It has an extensive network of global and regional partners. Locally, ADIC is a major investor in Abu Dhabi's financial services sector, holding significant positions within a number of the Emirate's key institutions.

## Third-largest financial institution in the UAE underway

Planning for the integration of Abu Dhabi Commercial Bank (ADCB), Al Hilal Bank and Union National Bank (UNB) commenced in 2018. With AED 423 billion in assets, the combined entity will be the third-largest financial institution and one of the largest retail lenders in the UAE, accounting for a 21 percent market share of retail loans as at 31 December 2018.

**Eissa Al Suwaidi**  
Chief Executive Officer -  
Abu Dhabi Investment Council

Eissa Al Suwaidi has served as Chief Executive Officer of Abu Dhabi Investment Council since its inception in 2007. He started his career at Abu Dhabi Investment Authority (ADIA) in the year 1982.

Mr. Al Suwaidi holds Board positions across several UAE and international organizations. He is Chairman of Abu Dhabi Commercial Bank, Chairman of Etisalat, and a Board Director of the Emirates Investment Authority. He is also Vice-chairman of Maroc Telecom.



Abu Dhabi Investment Council, UAE



Abu Dhabi Investment Council, UAE



# Focused on sustainable financial returns



As an active investor, Mubadala's Aerospace, Renewables and ICT platform is composed of diverse and dynamic companies from across the aerospace, renewables, ICT, utilities and defense industries.

In 2018, our business decisions were aligned to a strategy that focused on sustainable financial returns, furthering our shareholder's strategic objectives to position Abu Dhabi as a globally integrated and diversified economy. We completed significant milestones across our businesses and achieved our financial and operational goals.

In ICT, Yahsat successfully launched Al Yah 3, expanding its Ka-band coverage across Africa and establishing a presence in Brazil. Locally, Khazna Data Centers began the expansion of its facilities at Maydan and Masdar, which are set to deliver 25MW of IT load, more than double its current capacity, once the expansion is completed in 2019.

We also initiated an exciting partnership with the Department of Health and Injazat Data Systems to implement a Health Information Exchange System for Abu Dhabi, with the company signing an agreement with the Ministry of Defence on digital innovation.

Masdar continued to expand the UAE's clean energy portfolio - from autonomous mobility services to construction of the GCC region's first commercial-scale wind farm - furthering Abu Dhabi's position as a pioneer of renewable energy.

In Aerospace and Defense, Strata Manufacturing signed a major deal with Boeing for the new 777X aero structures. Turbine Solutions & Services (TS&S) secured a series of new contracts and partners as MRO customers.

Sanad continued to deliver impressive results across its portfolio, adding new clients and building on its existing relationships.

We are committed to enhancing Abu Dhabi's long-term future through our investments and global partnerships.

**Khaled Abdulla Al Qubaisi**  
Chief Executive Officer, Aerospace, Renewables & ICT

## Satellite launch

Yahsat's third satellite - Al Yah 3 - launched, expanding commercial services to 19 additional markets across Africa and bringing high-speed broadband to Brazil.

## US \$1.6B

Masdar signed a refinancing agreement worth £1.27 billion (US\$1.6 billion) with Equinor and China Resources Group for its 402-megawatt (MW) Dudgeon wind farm.

"We are committed to enhancing Abu Dhabi's long-term future through our investments and global partnerships."

**Khaled Abdulla Al Qubaisi**  
Chief Executive Officer, Aerospace, Renewables & ICT



Masdar City, UAE

Turbine Services & Solutions, UAE



## Boeing 777X

Strata Manufacturing awarded Boeing 777X composite aero-structures contract. This is the fourth work package that Boeing has awarded to Strata since 2013.



Dudgeon Offshore Wind Farm, UK



Dudgeon Offshore Wind Farm, UK

# 1M homes

The combined capacity of UK wind energy projects in which Masdar is a partner today exceeds 1 gigawatt, which is enough clean energy to supply nearly 1 million homes.

## A global renewable energy investor

**Masdar backed Dudgeon Offshore Wind Farm closes publicly rated landmark refinancing.**

In December 2018, Dudgeon - one of the world's largest offshore wind projects based in the UK - closed a GBP £1.4 billion financing package, including GBP £706 million of privately placed notes.

Located 32 kilometers off the Norfolk coast in England, the 402MW Dudgeon Offshore Wind Farm produces 1.7 terawatt-hours of electricity annually. The combined output of the 67 wind turbines is sufficient to power an estimated 410,000 UK homes and displace 893,000 tons of carbon dioxide.

Masdar and its co-shareholders in Dudgeon, Equinor and China Resources Group, lead the refinancing as a mark of the consortium's long-term commitment to the UK's renewable energy sector.

The combined capacity of UK wind energy projects in which Masdar is a partner today exceeds 1 gigawatt, which is enough clean energy to supply nearly 1 million homes.

The refinancing consists of GBP £1.27 billion in senior-term loans and approximately GBP £150 million in ancillary facilities provided from commercial bank commitments. The commercial bank and private placement tranches were both heavily oversubscribed, reflecting robust credit features and investor interest.

The credit rating agency Fitch rated the project A- for the refinancing of its existing non-recourse project debt.



# Investing in strategic partnerships

A new strategy, new brand and a new management mindset

Injazat Data Systems is an industry-recognized market leader in Information Technology, Data Center and Managed Services delivered from its Tier IV design-certified premier Data Center facility. The business services a diverse range of customers with a broad portfolio of IT related capabilities.

In 2017, a new management team was onboarded and Injazat underwent a transformation program focused on a new strategy with the following main pillars:

- New offers that would add value to clients
- Large Strategic projects through Public Private Partnerships
- Cost optimization to improve competitiveness

This new strategy was complemented with the launch of Injazat's new brand.

Value creation through strategic PPP projects is one of the main initiatives of this strategy, and was demonstrated through Injazat's collaboration with the UAE Ministry of Interior on project 'Hassantuk'.

Inaugurated in 2018 by His Highness Shaikh Saif bin Zayed Al Nahyan, Deputy Prime Minister and Minister of Interior, project Hassantuk is a smart fire detection system that proactively monitors fire and other emergency alarms in all critical and commercial buildings across different Emirates in the UAE.

Hassantuk uses state-of-the-art Alarm Transmission Equipment connected to a building's fire and life safety systems ensuring that any emergency or building maintenance alarms are transmitted to the central Alarm Receiving Center (ARC) within seconds. A team of professional ARC operators verifies if the alarm is genuine and reports valid emergencies to the Civil Defence Main Operations Room so that the appropriate assistance can be dispatched immediately or automatically passes maintenance alarms on to the building maintenance company for immediate repair.

Hassantuk is currently implemented in over 7,500\* buildings and this figure is growing daily. It is the largest automated, integrated fire and life-safety monitoring system of its kind in the region, supporting the UAE Vision of making it one of the safest countries in the world.



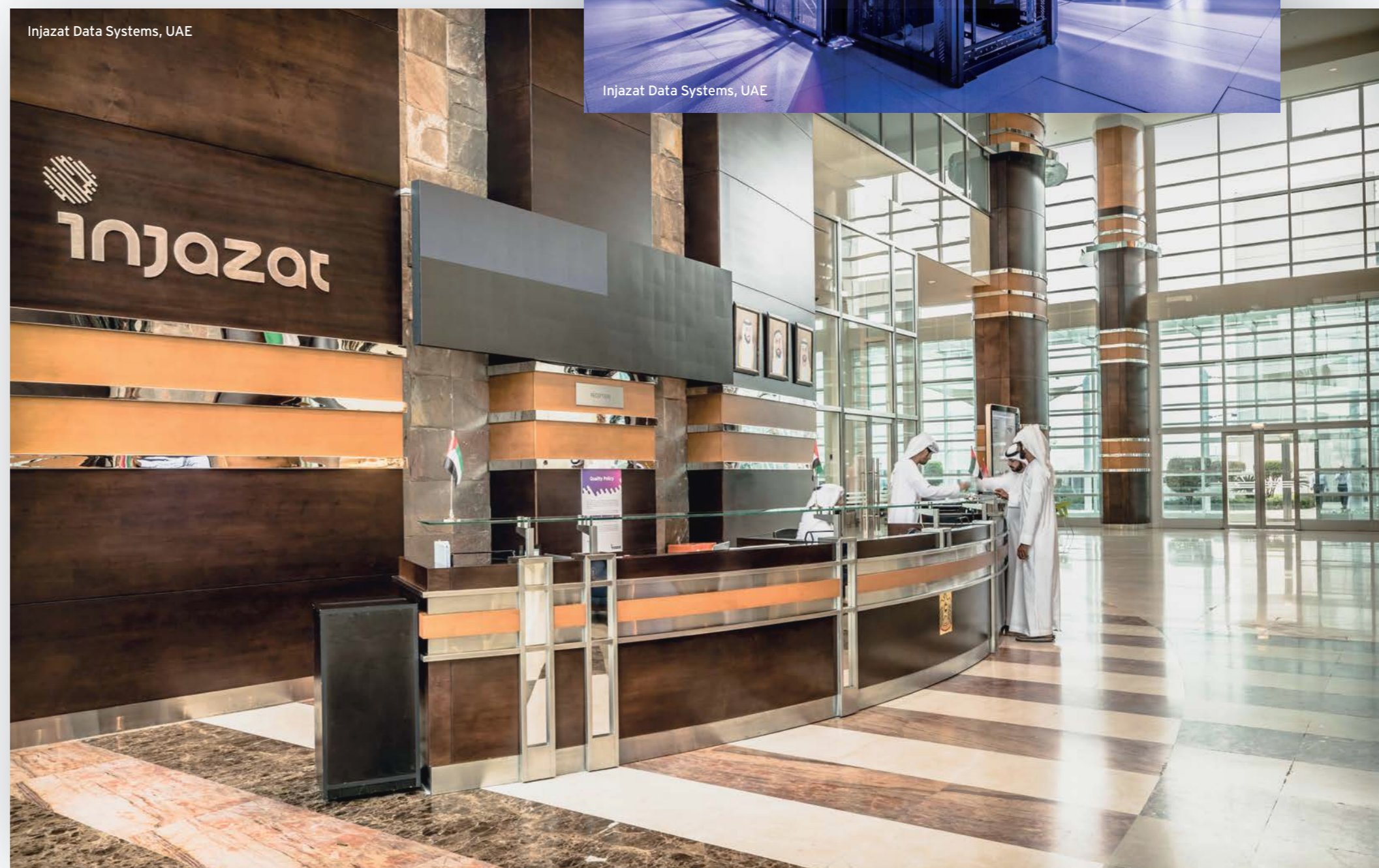
## 7,500 buildings

Hassantuk is currently implemented in over 7,500\* buildings and this figure is growing daily.

\* Figure accurate as of December 2018



Injazat Data Systems, UAE



Injazat Data Systems, UAE

# Expanding our portfolio with a focus on achieving returns



In 2018, the Alternative Investments and Infrastructure platform performed strongly despite market uncertainty.

Through Mubadala Capital, the results of our private equity and venture capital businesses surpassed expectations. Our trading platform also outperformed its respective benchmark, as did our debt and credit businesses. I am pleased to report that Mubadala Capital has maintained this strong performance through the first half of 2019. Improving market conditions has resulted in higher valuations, which is now prompting strategic discussions around monetization.

Mubadala Healthcare achieved a number of significant milestones in 2018 and our flagship asset, Cleveland Clinic Abu Dhabi continued to play a vital role in developing and sustaining new services for the community. The hospital delivered positive growth together with increasing efficiency, recording a greater number of international patient encounters as well as providing the highest quality of care to more patients across the UAE, reducing the need to travel abroad for treatment.

Most notably, Cleveland Clinic Abu Dhabi worked with a network of international and national partners to establish a transplant program. Following the hospital's first heart transplant in December 2017 - which was a remarkable first in the history of the UAE - the full multi-organ transplant program offered kidney, heart,

liver, and lung transplantations in 2018. In total, the hospital conducted 35 transplant operations by year end, an unprecedented feat for an academic medical center in its first three years.

Mubadala Real Estate and Infrastructure focused on managing for cash and yield in the local market. More broadly, we continued to deploy capital through a number of promising global investment opportunities, further expanding our portfolio across North America and Asia. We acquired a number of residential rental properties in nine US cities in addition to the acquisition of industrial sites in Japan. There has been a conscious effort to invest in commercial, industrial, residential and retail assets to further strengthen an already diversified and balanced portfolio.

Through these sectors, the Alternative Investments and Infrastructure platform will continue to contribute to Mubadala's overarching mandate to globally integrate and diversify the economy while delivering strong and consistent returns year on year.

**Waleed Al Mokarrab Al Muhairi**  
Deputy Group CEO and CEO, Alternative Investments & Infrastructure

"I am pleased to report that Mubadala Capital has maintained this strong performance through the first half of 2019."

**Waleed Al Mokarrab Al Muhairi**  
Deputy Group CEO and CEO, Alternative Investments & Infrastructure



Cleveland Clinic Abu Dhabi, UAE



## 70-100 investments

Mubadala has made 70-100 investments in technology firms through the SoftBank Vision Fund following its US \$15 billion commitment in 2017.

## US \$400M fund

Mubadala created a US \$400 million fund managed by Mubadala Ventures to invest in leading European technology companies.

## 35 organ transplants

By the end of 2018, Cleveland Clinic Abu Dhabi conducted 35 transplant operations, a significant achievement for an academic medical center in its first three years of operations.



Al Maryah Island, UAE



EMI Records, UK

US \$2.2B

Mubadala and Sony corporation acquired EMI in 2012.

US \$4.75B

Mubadala sold EMI Music Publishing to the Sony Corporation at an implied enterprise value of US \$4.75 billion (AED 17.45 billion).



EMI Records, UK

# EMI - A tune valued at US \$4.75B



## Unlocking the value of strong global partnerships

EMI is a leading music publisher with a catalogue of more than 2.2 million copyrights, spanning songs by iconic names including Queen, Sam Smith, Pharrell Williams and Drake.

In 2012, a consortium led by Mubadala and Sony Corporation acquired EMI for US \$2.2 billion (11.1x EV/2012 EBITDA). This investment represented an opportunity for Mubadala to partner with a music industry leader and take a strategic position in the industry.

After a five year holding period, Mubadala identified growing trends in the industry. There was a resurgence of the industry's subscription-based music streaming services and an increase in live artist performances.

In May 2018, Mubadala sold EMI Music Publishing to the Sony Corporation at an implied enterprise value of US \$4.75 billion (AED 17.45 billion).



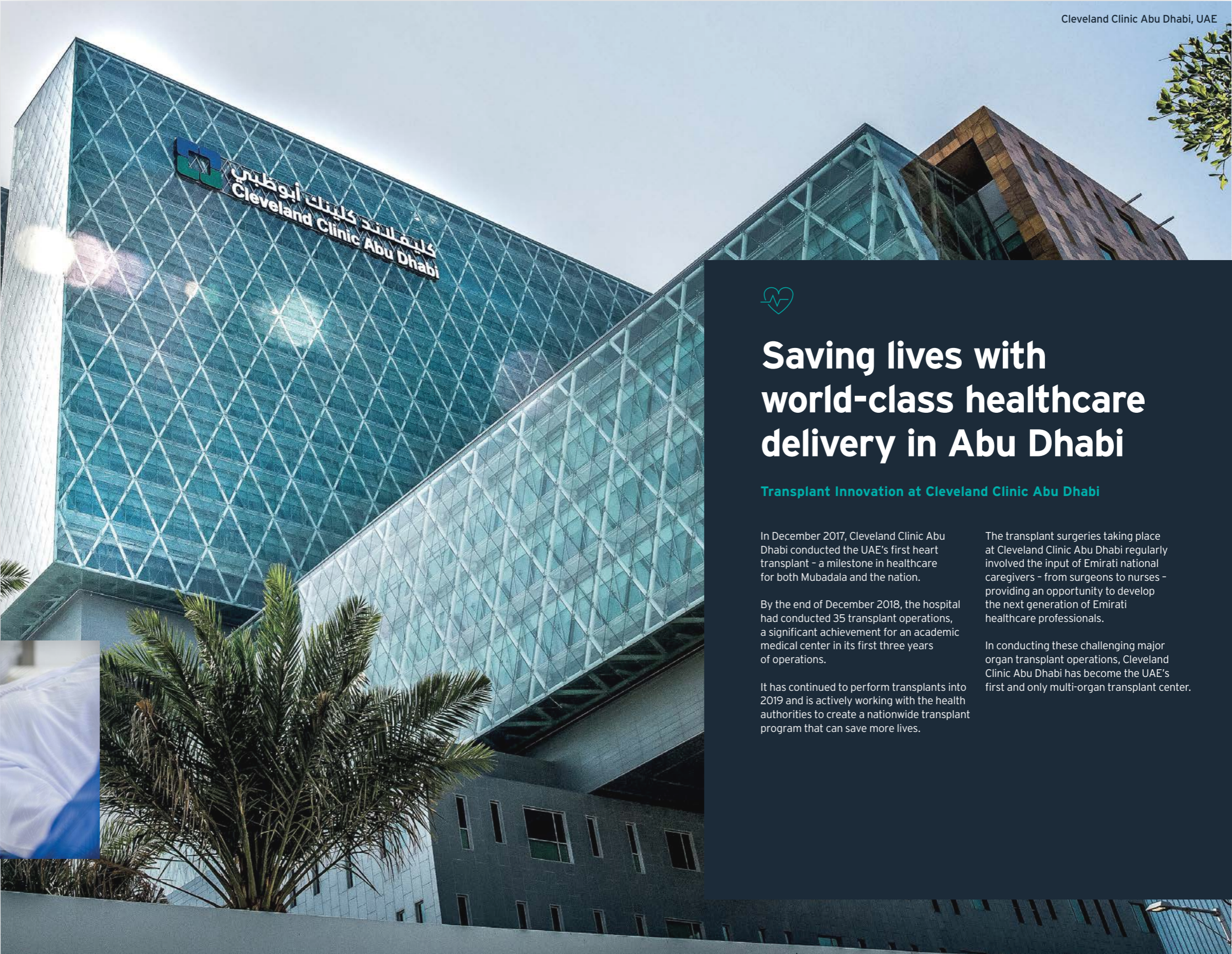
EMI Records, UK

No. 1

Cleveland Clinic Abu Dhabi has become the UAE's first and only multi-organ transplant center.

35

Cleveland Clinic Abu Dhabi has completed 35 transplants since the program launched in December 2017.



Cleveland Clinic Abu Dhabi, UAE



# Saving lives with world-class healthcare delivery in Abu Dhabi

## Transplant Innovation at Cleveland Clinic Abu Dhabi

In December 2017, Cleveland Clinic Abu Dhabi conducted the UAE's first heart transplant - a milestone in healthcare for both Mubadala and the nation.

By the end of December 2018, the hospital had conducted 35 transplant operations, a significant achievement for an academic medical center in its first three years of operations.

It has continued to perform transplants into 2019 and is actively working with the health authorities to create a nationwide transplant program that can save more lives.

The transplant surgeries taking place at Cleveland Clinic Abu Dhabi regularly involved the input of Emirati national caregivers - from surgeons to nurses - providing an opportunity to develop the next generation of Emirati healthcare professionals.

In conducting these challenging major organ transplant operations, Cleveland Clinic Abu Dhabi has become the UAE's first and only multi-organ transplant center.



Cleveland Clinic Abu Dhabi, UAE

# Global expansion and sector diversification

New niche markets with an ability to scale

During 2018, Mubadala Real Estate and Infrastructure (MREI) closed on multiple transactions that increased its global footprint and diversified its portfolio into lower volatility sectors.

In Asia, MREI joined two new institutional partners to complete its first investment in Japan, a circa ¥100 billion portfolio of logistics assets located in key cities and logistics corridors, further supporting Abu Dhabi's strategic objective of global integration.

In the United States, the team completed the acquisition of a US \$1 billion portfolio of residential rental properties in nine key cities. This transaction represents MREI's fifth investment with one of its existing

institutional partners, further demonstrating the importance of leveraging and scaling institutional relationships.

Both transactions offer attractive total returns underpinned by strong cash yields and direct exposure to a niche market with the potential for significant growth.

The near to intermediate term focus is on deploying capital with a bias towards "late-cycle" investing to deliver attractive and sustainable returns to Mubadala.



¥100B

Portfolio of logistics assets in Japan.

US \$1B

Portfolio acquisition of residential rental properties in nine key cities.

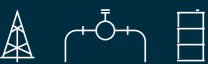


Tokyo City, Japan



New York Skyline, USA

# Focused on value creation, while effectively managing risk



As a global investor, our 2018 business activities were aligned with a strategy that was responsive to a dynamic energy landscape. We are focused on value creation, while effectively managing risks and creating resilience at a range of commodity prices.

- This was achieved through three key pillars:
1. Leveraging low-cost oil opportunities;
  2. Increasing the proportion of gas in our portfolio; and
  3. Expanding our petrochemicals footprint - targeting emerging and premium product markets through the application of our assets' proprietary technology and operating expertise, together with access to competitive feedstock.

The result was an integrated petroleum and petrochemicals portfolio operating across the hydrocarbon value chain with assets under management in excess of US \$40 billion.

In 2018, major projects began with investment commitments of more than US \$12.5 billion.

In the petrochemicals sector, Borealis and NOVA Chemicals formed a joint venture with TOTAL to develop Bayport Polymers, a petrochemicals plant in the US Gulf Coast. Borealis also commenced development of a new, world-scale propane dehydrogenation (PDH) plant at the existing production site in Belgium. NOVA Chemicals is expanding its polyethylene production in Canada through the construction of a second Advanced SCLAIRTECH™ technology facility (AST2).

Here in the UAE, we continued to play an active role in supporting the expansion of Abu Dhabi's downstream sector through investments in two petrochemicals projects in Ruwais. Cepsa is progressing engineering studies with ADNOC to bring its world-leading technology for the production of Linear Alkyl Benzene (LAB) to the region with a new LAB plant. Borouge commenced the development of an additional polypropylene plant (PP5), to be integrated with the existing Borouge 3 complex and grow the polymer production capacity to almost 5 million tons per annum by 2021.

In the upstream sector, both OMV and CEPSA signed agreements for 20 percent stakes each in two of Abu Dhabi's offshore fields under development: Umm Lulu and SARB. These partnerships reflect our strategy to increase value and sustainability by leveraging low cost oil production opportunities.

The gas projects we pursued through Mubadala Petroleum included entry into the offshore Shorouk Concession in Egypt, which contains the supergiant - more than 30 trillion cubic feet - Zohr gas field, and the successful bid submitted with PTTEP for participation in Erawan, one of Thailand's largest, long-term producing

"Our investment strategy has resulted in an integrated petroleum and petrochemicals portfolio operating across the hydrocarbon value chain with assets under management in excess of US \$40 billion."

Musabbeh Al Kaabi  
Chief Executive Officer, Petroleum & Petrochemicals



Cepsa, Spain



gas fields. The development of the offshore Pegaga gas field in Malaysia's SK320 continues to make good progress with the first construction-taking place in December 2018.

In 2019, we are continuing our focus on value creation and strong portfolio cash flow generation as well as looking at new value accretive investment opportunities. Through active asset management, the petroleum and petrochemicals team will ensure our portfolio companies deliver projects in line with overall Mubadala strategy.

Recently, we have agreed to sell down 30-40 percent of CEPSA to a new partner. When this transaction reaches completion, we will realize significant value from our long-term holding and yet remain the majority shareholder benefitting from the company's continued growth and performance.

Musabbeh Al Kaabi  
Chief Executive Officer, Petroleum & Petrochemicals

Cepsa, Spain



## 10% stake

Mubadala Petroleum acquired a minority stake from Eni in the Shorouk offshore concession in Egypt, which contains Zohr - the largest gas field in the Mediterranean.

## Gazprom Neft

Gazprom Neft, Mubadala Petroleum and the Russian Direct Investment Fund (RDIF) established a joint venture to develop oil fields in the Tomsk and Omsk regions of Western Siberia.

## US \$2B

NOVA Chemicals JV with Borealis formed Novealis Holdings LLC, which has partnered with Total to create Bayport Polymers.

Mubadala Petroleum, Thailand

# Working across the energy mix: from Oil & Gas to Renewables

Building a renewable future from a heritage of oil and gas

Mubadala believes that meeting rising global demand for energy calls for investment across the energy mix.

Today, Mubadala manages a diverse global energy portfolio with interests spanning renewables and the petroleum value chain, from exploration and production through refining, marketing and petrochemicals.

Its portfolio of energy companies and operational assets supports the UAE Vision 2021 and the UAE Energy Strategy 2050, which sets a 50 percent target for clean energy in the country's energy mix by 2050. These companies and assets also provide safe, reliable energy supplies in international markets and play an important core role contributing to Mubadala's financial performance.

Masdar has more than a decade of experience as a renewable energy developer and investor. With projects in more than 25 countries, the company is active in solar power, wind energy, storage technology, waste-to-energy projects and sustainable real estate.

Its iconic projects include Shams 1, the largest concentrated solar power plant in the world at the time of its inauguration in 2013, and London Array, one of the world's largest offshore wind farms.



As a leading developer and operator of utility-scale as well as off-grid renewable energy, Masdar is helping to expand energy access in emerging markets, commercialize new technologies and reduce the reliance on fossil fuels for electricity generation.

Our strategy in the petroleum sector is on low-cost oil, increasing the amount of gas in our portfolio as well as looking to growing and emerging markets in downstream.

New offshore developments by Cepsa and OMV in Abu Dhabi are providing access to low-cost oil production, which Mubadala Petroleum also supports through entry into new markets such as Russia.

Major gas investments have been made in partnership with companies such as Eni and others; these include the Zohr field, which is the largest gas discovery in the eastern Mediterranean and, as a result, is transforming Egypt's energy landscape.

In Southeast Asia, Mubadala Petroleum is developing the multi-trillion cubic feet Pegaga gas field in Malaysia. At the end of 2018, it was also successful in its bid to enter the Erawan gas field in 2022 following the expiry of the current concession.

25

Number of countries Masdar is active in as a renewable energy developer and investor.

20% stake

ADNOC signed an agreement with Cepsa, awarding it a 20 percent stake in Abu Dhabi's offshore Sateh Al Razboot (SARB) and Umm Lulu concession.



Cepsa, Spain

Shams Power Company, UAE



# Innovation in plastics

## Pioneering disruptive technologies and building partnerships to reduce environmental impact.

Through our portfolio assets Borealis and NOVA Chemicals, we are embracing technology disruption as a catalyst to inspire innovation and sustainability. As world-leading and responsible investors in polyethylene and polypropylene, both firms are pioneering lighter, more sustainable and easily recyclable products.

Both companies operate innovation centers in multiple locations, where they work in partnership with their manufacturing customers to develop, test and tailor complex new materials with particular emphasis on enhancing recyclability and using recycled feedstock.

Borealis also recognizes the environmental impact of poor waste management of plastics. In response, the company has initiated multiple initiatives, including investing in efficient recycling plants.

In June 2018, Borealis announced a €15 million Euro investment project in mtm Plastics GmbH, the German technology leader in the recycling of mixed post-consumer plastic waste and one of Europe's largest producers of post-consumer polyolefin

recyclates. The Company also announced the successful acquisition of Austrian plastics recycling company Ecoplast Kunststoffrecycling GmbH, reinforcing its commitment to recycling and further developing its mechanical recycling capabilities.

Borealis has also co-founded Project STOP, an initiative that aims to stop plastic waste from leaking into the environment, with a focus on regions like Southeast Asia, where the issue is particularly acute. Through partnerships with municipalities and other local stakeholders, such as those in the initial project in Muncar, Indonesia, STOP works to reduce waste and increase recycling, ultimately improving the environment and public health, and create jobs through a more circular approach. Borouge and NOVA Chemicals have also joined the program.

Learn more here:  
[www.stopoceanplastics.com](http://www.stopoceanplastics.com)



Borealis, Austria

## EUR 15M

Borealis announced a €15 million Euro investment project in mtm Plastics GmbH.

## US \$2M

Mubadala has joined Borealis and others in Project STOP and has committed to a three-year investment in the project.

Nova Chemicals Corporation, Canada



Borealis, Austria



OMV, Austria



Borealis, Austria



# Supporting the development of the ‘Downstream’ sector in Abu Dhabi

Advancing the nation in partnership with ADNOC, CEPSA and Borealis.

A key pillar of our Petroleum and Petrochemicals strategy is to support the continued development of the downstream petroleum sector in Abu Dhabi. This effort helps realize greater value from the nation’s petroleum resources, as well as providing profitable growth opportunities for our refining and petrochemical businesses.

Mubadala is working with our portfolio companies Cepsa, Borealis and, most recently, OMV in partnership with ADNOC deliver this goal.

As the world’s leader in the production of Linear Alkylbenzene (LAB), Cepsa will be bringing this technology to the UAE. The new LAB facility will be fully integrated within the ADNOC refining and petrochemicals complex in Ruwais, Abu Dhabi. It will use feedstocks of kerosene and benzene while benefitting from the suite of utilities and services at the Ruwais complex. The facility is expected to have a production capacity of 150,000 tons per annum and upon completion will be the world’s largest LAB plant.

Through Borouge – a joint venture between Borealis and ADNOC – Mubadala continues to support the expansion of petrochemicals capacity in the UAE. Borouge’s latest polypropylene plant (PP5), for which the Engineering, Procurement and Construction (EPC) contract was awarded in mid-2018, will be integrated with the existing Borouge 3 complex in Ruwais and grow the polymer production capacity to almost five million tons per annum by 2021.

These projects demonstrate Mubadala strategy in mobilizing technology, operating expertise, market knowledge and capital from its portfolio companies to contribute to the sustained and profitable growth of Abu Dhabi’s downstream capabilities.



150,000 tons

Expected annual Linear Alkylbenzene (LAB) production capacity of the Ruwais complex.

5M tons

Expected annual polymer production capacity of the Borouge 3 complex.



Cepsa, Spain

10,800

Number of people from the local fishing community which benefitted from the Zayed School and Community Hall built by Mubadala Petroleum.

40+

The Zayed School and Community Hall project is one of more than 40 community investment projects completed by Mubadala Petroleum in 2018.



# Year of Zayed school project in Thailand

A responsible investor in the communities where we operate

To commemorate the Year of Zayed in 2018, Mubadala Petroleum funded the redevelopment of an elementary school community hall in a fishing community on the Gulf of Thailand.

The Zayed School and Community Hall at the Ban Chaytalae Bnagkracao School in Samut Sakhon province is located near Mubadala Petroleum's Jasmine and Manora offshore oil fields.

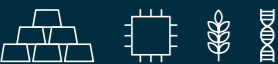
With Mubadala Petroleum's support, the newly renovated facility has provided the community of 10,800 with a much-needed multi-purpose space for school functions, assemblies, performances and cultural events. The renovations also included important safety enhancements.

Employees from Mubadala Petroleum in Thailand volunteered alongside the local community to help in the final stages of the renovation work. At the inauguration, the local fishing community were also given the opportunity to learn more about Mubadala Petroleum's offshore operations to build a better understanding of the business.

As a responsible investor and partner, Mubadala Petroleum has been active for several years in introducing social initiatives and contributing to the communities in the vicinity of our operations.



# Entering new sectors and monetizing mature assets



During 2018, our platform continued to build on its strategies of developing global industrial champions, entering new sectors that are riding secular growth trends, and monetizing mature assets to deliver strong financial returns.

Internationally, AMD was the S&P 500's best performing stock, delivering a stellar annual gain of more than 81 percent. In line with Mubadala's strategy to monetize mature holdings, we sold 22 million common equity shares in July 2018. We remain among AMD's top shareholders.

The global agribusiness market is valued at US \$5 trillion. We established a presence in this market, prioritizing aquaculture, by deploying capital in businesses that responsibly address long-term supply constraints and for whom innovative technologies can be transformational.

We agreed to acquire majority stakes in three European fish farming companies: acquiring the Greek businesses Nireus SA and Selonda SA through the leading Mediterranean aquaculture player Andromeda Group, which operates in both Greece and Spain.

Building on our position in Lonza, we invested in a number of leading companies and specialist funds in the Pharma and Biotech sectors, including Sebela, Zoetis and GHO.

In our first US private medtech investment, we participated in Outset Medical's Series D equity financing round. Outset's product, the Tablo, has the potential to improve the lives of more than 3.5 million people that require regular dialysis care through the introduction of patient-friendly technology and cloud-based computing.

Locally, Emirates Global Aluminium (EGA) completed construction of the Al Taweelah Alumina Refinery. This US \$3.3 billion strategic investment expands EGA's business upstream in the aluminium value chain and creates a new industrial growth engine for the UAE. It is the UAE's first alumina refinery.

Together with Dubal Holding, we signed a 25-year deal with EGA to develop a state-of-the-art power block and water desalination plant at Jebel Ali. Capable of generating over 600 megawatts of electricity, this facility reduces environmental emissions, increases EGA's energy and power efficiency and enables further capacity creep.

**Ahmed Yahia Al Idrissi**  
Chief Executive Officer, Technology,  
Manufacturing & Mining

"The global agribusiness market is valued at US \$5 trillion. We established a presence in this market, prioritizing aquaculture, by deploying capital in businesses that responsibly address long-term supply constraints and for whom innovative technologies can be transformational."

**Ahmed Yahia Al Idrissi**  
Chief Executive Officer, Technology, Manufacturing & Mining



Emirates Global Aluminium, UAE

## 75% completion

Emirates Global Aluminium announced that its bauxite-mining project in the Republic of Guinea has reached 75% construction completion.

## US \$425M

Mubadala sold 22 million common equity shares in AMD for US \$425 million. AMD ended 2018 as the top-performing stock on the S&P 500, according to MarketWatch.

## 61,000 tons

Al Taweelah alumina refinery received its first bauxite shipment of c. 61,000 tons in June.



GLOBALFOUNDRIES, USA

# A strategic growth project expanding the aluminium value chain

## Al Taweelah Alumina Refinery

The Al Taweelah Alumina Refinery is a strategic growth project for Emirates Global Aluminium. The project expands its business upstream in the aluminium value chain.

Commissioning for the plant commenced in December 2018, heralding the start of a new industrial activity for the UAE.

The refinery, which is located in Khalifa Industrial Zone Abu Dhabi, cost approximately US \$3.3 billion to develop and will produce some two million tons of alumina per year, securing EGA's competitive supply of this vital raw material.

Preparations to operate the refinery began in October 2013, taking 500,000 hours of work to complete. Construction of the refinery then took more than 72 million hours.

Onsite safety processes and systems were managed by 280 safety professionals during construction. The total recordable incident frequency rate for the project was less than 10 percent of the rates for heavy industrial construction in the United States in 2017 (Source: US Bureau of Labor Statistics). There were zero fatalities.

Fifty-two thousand tons of steel were used to build the refinery, enough for seven Eiffel Towers. The new plant contains 9,500 instruments, 222 separate tanks and enough piping to stretch from Abu Dhabi to Muscat.

More than 20 major contracting companies worked on the project, with 80 percent of the contracts by value being awarded to UAE-registered companies.

Some 585 people work in the refinery's operations team, including alumina-refining veterans from countries as far afield as Australia and Jamaica, together with 66 UAE nationals who were specifically trained and developed by EGA for their roles.

The plant is managed from a sophisticated control room, which has three times the instrumentation of a modern airliner.



Emirates Global Aluminium, UAE

**US \$3.3B**

Refinery development cost US \$3.3 billion and it will produce two million tons of alumina per year.

**80% of contracts**

80 percent of contracts by value were awarded to UAE-registered companies.



Emirates Global Aluminium, UAE

Emirates Global Aluminium, UAE



# Investments and Divestments

The group takes an active approach to portfolio management to optimize investments and capture value

Mubadala Investment Company is focused around a central mission: To help shape the future of Abu Dhabi's economy by delivering risk-adjusted returns and advancing the emirate's position across strategic sectors.

To deliver on this ambitious mandate, the group deploys capital across a range of structures and asset classes with an active approach to portfolio management to optimize investments and capture value.

### Divesting at the right time and valuation

In 2018, Mubadala prepared for an IPO of CEPSA, one of its upstream and integrated petroleum businesses. Market testing did not reflect the value underpinning the company, resulting in the postponement of the process.

Six months later, Mubadala reached an agreement with the Carlyle Group, a long-standing partner, to acquire 30-40% of CEPSA.

### Recycling capital into new sectors and markets

In 2018 Mubadala entered into promising geographic markets such as Greece, Serbia and Egypt. New sectors specialty pharmaceuticals, agribusiness and medical technology.



Focusing on healthcare, with the average global lifespan increasing by three years every decade, longer lives mean more chronic diseases and an ever-increasing demand for effective medical treatments and technology.

Responding to this trend, Mubadala has identified a range of value creation opportunities in the pharmaceuticals and medical technology sectors. These have a low correlation with Mubadala's current portfolio, strong resilience to market downturns and significant levels of Total Shareholder Return.

In 2018, Mubadala invested \$132m in Outset Medical, the pioneering medical technology company. Its first-of-a-kind product, Tablo enables home-based kidney dialysis; reimagining dialysis for patients and health care providers and addressing one of the most significant areas of global healthcare spend.



## US \$132M

Mubadala led Outset Medical's US \$132 million Series D fundraising round, becoming one of the company's top four investors.



Pharmaceuticals

# Looking Ahead

Technology is now a significant focus for Mubadala.

As a sovereign investor for Abu Dhabi, we are committed to support our shareholder's ambition to position the city as a regional tech hub. Through our global tech investments, we will further Abu Dhabi's global integration and continued economic diversification. As a trusted partner, an engaged shareholder and a responsible company, Mubadala is investing for the nation.



