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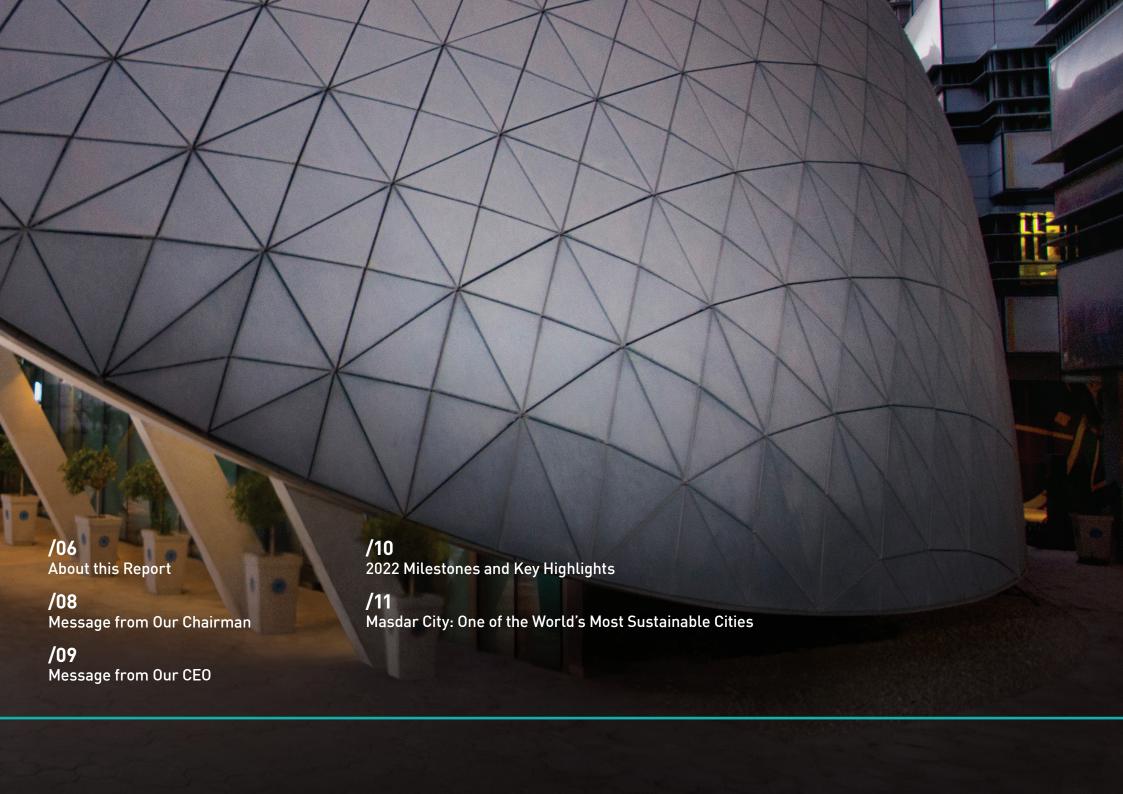


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# About this **Report**

We are pleased to share Masdar City's first ESG report as a distinct entity. This report focuses on our ESG goals, actions, and performance. Through this report, we aim to demonstrate our commitment to transparency on material topics that are most relevant to our stakeholders.

#### **Reporting Scope**

We published our annual ESG performance through our consolidated Sustainability Report with Abu Dhabi Future Energy Company (Masdar) until 2022. On December 8, 2022, it was announced that the Abu Dhabi National Energy Company PJSC (TAQA), Mubadala Investment Company (Mubadala), and Abu Dhabi National Oil Company (ADNOC) would form a global clean energy powerhouse focused on renewable energy and green hydrogen under the Abu Dhabi Future Energy Company (Masdar) brand. With this new ownership structure and shareholder arrangement, Masdar City is now solely under Mubadala as a separate entity. In light of these developments, we embark on publishing our ESG performance as Masdar City separately, starting with this report. Through this report, we aim to showcase our commitment to our ambitions, actions, and impact, as well as highlight our accomplishments as a newly independent organization.



This report covers relevant quantitative and qualitative ESG data for all Masdar City activities and operations during the reporting cycle spanning from January 1<sup>st</sup> 2022 – December 31<sup>st</sup> 2022. It also includes information on our planned future activities and programs from 2023 onwards

#### **Reporting Frameworks**

This report is in reference to the Global Reporting Initiative (GRI) Standards' 2021 disclosure requirements. Our detailed GRI Index can be found on page 94.

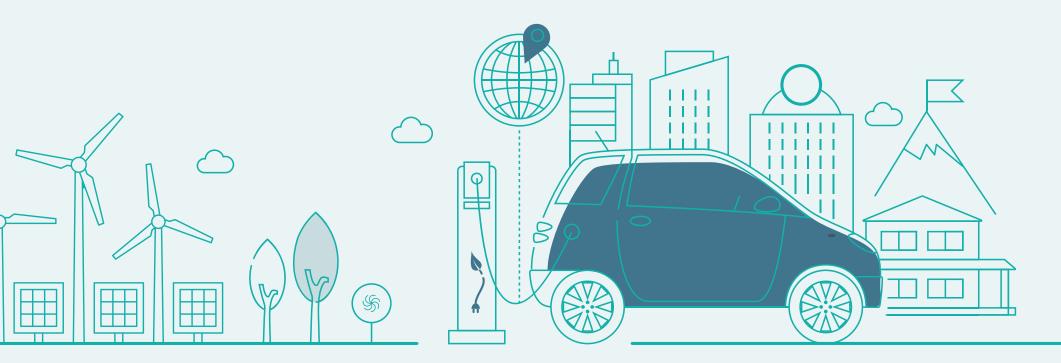
#### **Forward-Looking Statements**

In this report, we include forward-looking statements that outline our future. These statements are grounded in reasonable assumptions and past performance. However, it is important to note that these are contingent upon various factors, such as industrial development, geographical market conditions, government policies, laws, regulations, and other incidental factors. Due to the variable nature of these factors, the statements should be regarded as inherently speculative, and the underlying assumptions may undergo significant changes.

#### Contact details:

If you have feedback on this report, please contact us at **ESG@MasdarCity.ae** 

To learn more, visit Masdar City's website: masdarcity.ae



## Message from Our Chairman



Masdar City has been pioneering sustainable urban development since we broke ground in 2008, long before sustainability was on trend. And look at the UAE today: we are hosts of the most important climate change gathering in the world, and international leaders in driving climate change solutions. Indeed, sustainability is part of the UAE's very fabric—and Masdar City has played a vital role in creating this legacy.

Last year, 2022, was our first as an independent company, and a vital milestone for us. This next chapter in our story is an opportunity to highlight our strengths and our vision for the future.

This ESG report highlights how we are continuing to protect and enhance the natural environment while accelerating the UAE's ambitious goal to achieve net-zero by 2050. I invite you to read through it to learn more about the transformational work we are doing within the UAE and the impact we are having worldwide. I know that we will reach even greater heights.

The achievements you will see throughout are only a hint of what is to come. Particularly as we look to COP28, we are laser-focused on how we can come together and fulfill our commitments, both to the country and the planet. We will continue to establish ourselves as international

industry leaders in sustainable development and innovation, and one of the most sustainable cities in the world.

On behalf of Masdar City's leadership, I extend our heartfelt gratitude to our employees, partners, stakeholders, and community members. Your dedication, passion, and commitment are what propel us forward on this incredible sustainability journey. There is so much more to come.

#### Abdulla Balalaa

Chairman

# Message from Our Chief Executive Officer



I am incredibly proud to be presenting Masdar City's latest ESG report—our first as an independent entity. I have been with the organization since its early days when the city consisted of a few buildings, a solar farm, and an incredible vision. Today, Masdar City is a global reference point for sustainable urban development and home to one of the largest clusters of LEED Platinum buildings in the world. It has been an honor and a privilege to be part of this story for so long.

Our achievements over the last year show incredible momentum: we are growing faster than at any time in our history. We signed a green loan with First Abu Dhabi Bank (FAB) to allow us to expand our portfolio of sustainable real estate. Our commercial properties currently have an occupancy rate of 99 percent, and demand is growing. To help meet this demand, we broke ground on two ambitious projects, Masdar City Square and The Link.

Masdar City Square will comprise of seven buildings that are rated LEED Platinum, WELL Gold, and Estidama 4-Pearl buildings. One of the buildings will be a net-zero energy HQ—the first of its kind in Abu Dhabi. We have already secured a prestigious tenant who is looking forward to joining our vibrant business ecosystem.

The Link will feature five LEED Platinum, WELL Gold, and Estidama 4-Pearl buildings. One of these buildings, CO-LAB, an innovative shared working and living space, will be the first building of its kind in the region.

Of course, by the end of this year, we will also have completed NZ1, the first of many net-zero energy office buildings. We cannot wait to show the world.

I invite you to delve into this ESG report and discover some of the other progress we have achieved together. I hope you will celebrate the strides we have taken. I also hope you will share your feedback. You are a valued member of our community, and your ideas and suggestions will help us continue to drive positive change, inspire others, and shape a more sustainable future.

Ahmed Baghoum CEO

## 2022 Milestones and

## **Key Highlights**

Guided by our purpose, we are proud to highlight our accomplishments of 2022 on our ESG performance, specifically within our key focus areas, which include reducing our environmental and carbon footprint, championing climate action, supporting local communities, and upholding our commitment to corporate governance, among others.

### At the forefront of sustainable urban development and climate action



**66** percent

waste reduction through recycling



38 percent

energy use intensity (EUI) reduction against ASHRAE baseline



29 percent

savings in water consumption across our building portfolio against Estidama PBRS baseline



418 tCO2e

of emissions avoided from recycling = equivalent to taking 90 gasoline-powered vehicles off the road



The equivalent of

38 percent

of our energy consumption has been produced in renewable energy and returned to the grid



21,188,480 kWh

energy savings against ASHRAE baseline = avoiding 7,416 tCO<sub>2</sub>e, equivalent to taking 1,610 gasoline-powered vehicles off the road



4,810 tCO2e

offset from power generated from renewable sources = equivalent to taking 1,045 gasoline-powered vehicles off the road



53 percent

reduction in Scope 1 emissions vs 2019 emissions = equivalent to taking 56 gasoline-powered vehicles off the road



67,376 m<sup>3</sup>

water savings across our building portfolio against Estidama PBRS baseline = equivalent to taking 168 gasoline-powered vehicles off the road

### A Global Model for Sustainable Urban Development



16

assets with green building certifications



1

net-zero energy building completed



3

net-zero energy buildings under construction



59,000 m<sup>2</sup>

of community parks

## Creating Economic Value Through Sustainable Investments



Masdar Green REIT signs

## green financing commitment with First Abu Dhabi Bank



Masdar Green REIT bolsters portfolio with

AED934 million

sustainable real estate acquisitions

#### A Great Place to Live, Work and Learn



9 years

Managed a total of

official delegations in 2022

(177 percent increase from

257

2021)

average staff turnover



100 percent

spending on local suppliers



909

customers engaged with an average customer return rate of 85 percent in 2022



50 percent

of new hires were women in 2022



Zero Fatalities

across all of Masdar City's activities in 2022



Continued social programs such as

Innovate, The Festival, and free guided tours

for students and establishments

# Masdar City: One of the World's Most Sustainable Cities

Masdar City is a vibrant community where residents, academics, and business professionals live, learn, work, and enjoy in an environment that pushes the boundaries of sustainable design, construction, and operation. Located five minutes from Abu Dhabi International Airport and 20 minutes from Abu Dhabi's downtown area, Masdar City offers a gateway to international business and development opportunities, and its accessibility will be further enhanced with the introduction of transport and metro networks in the near future.

Masdar City is enabling innovation in sustainability and clean technologies by integrating education, research and development, investment, and business opportunities into the city's purpose.

# The Future Standard of Living While construction began in 2008, Masdar City now contains one of the largest clusters of LEED Platinum buildings in the world: • The city is built with traditional Arabic architecture combined with modern technology and design • Buildings are designed to high sustainability standards and certified by the Department of Municipalities and Transport's (DMT) Estidama, and/or the U.S. Green Building Council's LEED green building rating system. • The community also features amenities such as recreational facilities, and two parks and green spaces, covering a total area of over 59,000 square meters.

## A Hub for Innovation, Research and Development

Masdar City continuously fosters innovation that drives climate action. The city is a hub for leading innovative research and development initiatives, enabling real-world solutions in energy and water efficiency, mobility, and artificial intelligence, among others. This is demonstrated by the International Renewable Energy Agency (IRENA)'s establishment of its headquarters in the heart of Masdar City, and other key tenants including government and private entities as seen below.





Our technology pilots include sustainable power solutions, expansion of green spaces, improvements to the environmental performance of buildings, mobility programs and the promotion of sustainable urban agriculture.

## A Low-Carbon Business Oasis

Our free zone, a powerful business enabler, is home to more than 1,000 businesses of all sizes who are ushering us into the future.

Providing low carbon infrastructure to

1000+

companies

### Key tenants include:

- Abu Dhabi Future Energy Company Masdar
- Abu Dhabi Public Health Center
- Abu Dhabi Quality and Conformity Council
- Advanced Technology Research Council
- Emirates Nuclear Energy Corporation
- General Administration of Customs in Abu Dhabi
- Global Green Growth Institute
- Honeywell
- Khalifa Universit
- Khazna Data Centers Limited
- Mohamed bin Zayed University of Artificial Intelligence
- ◆ National Central Cooling Company PJSC Tabreed
- Saint-Gobain
- Siemens Energy LLC
- ◆ Siemens Industrial LLC
- Technology & Innovation Institute
- UAE Space Agency

## The Masdar City's Free Zone status provides tenants with advantages and benefits, including:

#### **Enhanced ESG performance**

due to our sustainable office spaces, low-carbon transportation, etc.



**Highly cost-effective** 

licensing and office space



R&D

ecosystem



Launching point

into local, regional, and international markets



Freedom of repatriation of both capital and profits







### 100 percent

exemption from corporate and personal income taxes



## 0 percent

import tariffs



A multi-sector **knowledge** and **talent innovation** ecosystem



Quick and easy set-up, with the 'One-Stop Shop' for registration, government relations and visa processing





## Our Approach to **ESG**



#### Message from the Executive Director, Sustainable Real Estate

The need for climate-resilient development inspired the creation of Masdar City more than 15 years ago. Today, Masdar City is a key pillar in the UAE's response to climate change, accelerating the journey to net-zero by 2050. Our first ESG report aims to achieve two main objectives: setting a baseline for measuring our future sustainability performance and accelerating our decarbonization efforts as we move towards a net-zero future. Our ESG strategy sets a forward-looking benchmark on climate change for the business community.

During the reporting period covered in this report, Masdar City's sustainability achievements were remarkable. We have spent the past year measuring our carbon footprint and continuing our emission reduction analysis across our portfolio. We set aggressive goals, we are transparent with our progress, and we hold ourselves accountable. Partnership will be essential to help us realize our goals, and we intend to work with our community members to reduce our collective carbon footprint. As our impact on people and

communities around us grows, sustainability remains central to delivering on our purpose and driving business results.

I hope that this report will deepen your understanding of Masdar City and its sustainability efforts. I look forward to continuing to invest, incubate, and pursue bold innovation and sustainable development in the UAE.

#### Mohamed Al Breiki

Executive Director, Sustainable Real Estate

## Our Approach to **ESG**



### Message from the Associate Director, Sustainability and CSR

When I first arrived to join the Masdar City architectural design team over 15 years ago, the land was occupied by just a few temporary site offices in the sand. A few years later, we completed the first LEED Platinum building in Abu Dhabi. In so doing, we developed an architectural approach that married the client investment case with the environmental sustainability outcome: we made green design commercially viable. That is, rather than focusing exclusively on environmental sustainability and making budget-based compromises later, we prioritized social and environmental sustainability from the beginning. We also utilized the expertise of an interdisciplinary team of experts, prioritized innovation as well as passive design, and worked with the local climate instead of against it.

Our approach paid off. Today, Masdar City is home to one of the largest clusters of LEED Platinum buildings in the world. Thirteen additional LEED Platinum buildings are under construction, three of which will be net-zero energy.

This trajectory illustrates Masdar City's history of moving forward regardless of the circumstances—of solving problems rather than fixating on

barriers. This is the essence of this report: it details the tangible actions we have taken and are continuing to take on our journey to net-zero. Our approach is data-driven, ambitious, and collaborative. We are not just talking about ESG. We are practicing it—every day.

I hope you will read through this report, celebrate our accomplishments, reflect on the challenges we have yet to overcome and consider how you might be part of the movement toward a more sustainable future.

#### Chris Wan

Associate Director, Sustainability and CSR

# Aligning with UAE's net-zero by 2050 Strategy

Achieving net-zero is the very reason Masdar City was born. Since its inception, the city has been focused on achieving this goal, and further supporting for the UAE's commitment to addressing climate change.

UAE's net-zero by 2050 Strategy was an ambitious undertaking by the UAE government and the seven emirates that showcases the country's commitment to reducing carbon emissions by 2050. This is an initiative that unveiled UAE's investment plans in clean and renewable energy generation over the next three decades. The UAE's vision acts as a guide for the development of action plans, policies, and strategies for climate action. It relies on measuring and monitoring greenhouse gas emissions in each of the seven emirates.

Masdar City is instrumental in supporting the UAE's ambition to achieving net-zero. Throughout this report we aim to demonstrate our contributions to the achievement of this goal by disclosing our climate action ambitions and performance. In addition to supporting national targets, Masdar City is creating a community of residents and businesses all committed to living sustainably.

Together with Masdar (Abu Dhabi Future Energy Company), we play a crucial role as hosts to the annual Abu Dhabi Sustainability Week (ADSW) event. ADSW gathers stakeholders from all around the world and provides them with a platform to come together to create meaningful conversations, forge partnerships, and pledge investments towards UAE's commitment to achieving net-zero by 2050.

## Aligning with the

## United Nations' Sustainable Development Goals

The United Nations' Sustainable Development Goals (UN SDGs) are a set of goals that aim to address global challenges and serve as a roadmap to achieve a more sustainable future by 2030. The UAE's National Agenda is aligned with this framework and takes into account economic, social, and environmental factors that impact the country's development.

Masdar City supports the UAE's commitment to the agenda and has mapped our ESG initiatives against the SDGs.









Target

**Masdar City Initiatives** 

**Goal 1** – End poverty in all its forms everywhere

Goal 2 – End hunger, achieve food security and improved nutrition, and promote sustainable agriculture **Goal 3** – Ensure healthy lives and promote well-being for all at all ages

**Goal 4** – Ensure inclusive and quality education for all and promote lifelong learning

- •
- Consistent creation of jobs during construction and long-term uses
  - Providing access to untapped community resources that benefit the community
  - Providing support for start-ups
- Masdar City hosts agritech startups with greenhouses and farming area
- One of the beta-site's primary goals will be to promote national food security solutions
- 100 percent of employees and contractors are covered by an externally certified health and safety management system
- City planning based on promoting walkability
- Integration of sports facilities and active lifestyle
- Partnerships with local schools and universities to provide mentoring, training, and job opportunities
- Annual employee training, internal and external learning courses, coaching, and mentoring
- Emiratization and Human Capital unit is responsible for training and learning programs available to all

**Target** 

Masdar City Initiatives



## 6 CLEAN WATER AND SANITATION

DECENT WORK AN

Goal 5 - Achieve gender equality and empower all women and girls

Goal 6 - Ensure access to water and sanitation for all

Goal 7 - Ensure access to affordable. reliable, sustainable, and modern energy for all

(0)

Goal 8 - Promote inclusive and sustainable economic growth, employment, and decent work for all

- Multiple targets for women in management and the workforce
- 50% of new hires are women
- Women entrepreneurship package to promote women-owned businesses in Masdar City Free Zone
- Vigorous environmental requirements set for water resource management, which has been applied to all buildings in Masdar City since inception
- In 2022, 13,743,260 kWh of renewable energy was generated
- Electric vehicle chargers in multiple locations provide free charging
- Research and development into geothermal energy
- Developing partnerships to promote the use of clean hydrogen

- Consistent creation of jobs during construction and operations.
- Educational engagement with local schools and universities
- ◆ The Catalyst, our climate tech venture capital fund
- Green financing in real estate sector



Goal 9 - Build resilient infrastructure, promote sustainable industrialization



Goal 10 - Reduce inequality within and among countries



Goal 11 - Make cities inclusive, safe, resilient and sustainable

- and foster innovation Masdar City is a research and
- development hub Masdar City is exploring use
- geothermal energy Masdar City is home to developing hydrogen
- Masdar City has a Social Activities and Inclusion Committee (SAIC) that oversees social activities and procedures, and ensures all decisions are made in accordance with the existing SAIC charter
- The procurement process prioritizes working with vendors that reflect our values and offers the opportunity to support diverse businesses and create more inclusive communities that we invest in
- Free zone status allows for 100 percent foreign ownership
- Robust ethics and compliance standards in place

- Masdar City is a mixed use low carbon urban development
- Three net-zero energy buildings are currently under construction in Masdar City
- Safe and sustainable mobility provided across Masdar City
- Promotion of walkability

**Target** 

technology



Target

Masdar City Initiatives







**Goal 12** – Ensure sustainable consumption and production patterns

**Goal 13** – Take urgent action to combat climate change and its impacts

**Goal 14** – Conserve and sustainably use the oceans, seas, and marine resources

Goal 15 – Sustainably manage forests, combat desertification, halt, and reverse land degradation and halt biodiversity loss

- Circular economy principles are embedded in all procurement guidelines and standards
- Recycling of operational waste
- Material recycling facilities in place to recycle construction waste
- ◆ By 2050, we will achieve net-zero in Scope 1, 2, and 3 emissions
- In 2023, we plan to conduct a mangrove planting initiative in Abu Dhabi.

  We envision that this initiative will support the livelihoods of the communities in these coastal areas, and simultaneously promote biodiversity and act as a carbon sink in the future to help capture Greenhouse Gas (GHG) emissions from the atmosphere
- Timber sourced from Forest Stewardship Council (FSC) certified forests
- Focus on use of native plants
- Reuse of existing plants to prevent disposal





**Goal 16** – Promote just, peaceful, and inclusive societies

**Goal 17** – Revitalize the global partnership for sustainable development

- Ensure that all our suppliers and contractors practice ethical and legal standards to effectively eliminate all forms of violence, exploitation, corruption, and bribery in our supply chain
- ◆ Constantly seeking likeminded organizations to partner with to further the sustainability agenda
- Welcome delegations, including heads of state, ambassadors, diplomats, business delegations, and private sector academia to showcase and promote Masdar City's pioneering efforts in sustainability and sustainable urban living
- Partnerships created through The Catalyst



Target

## Our **ESG Strategy**

ESG is an integral part of our operations and activities and is intrinsically linked to our vision and journey. We are in the process of developing an ESG policy that focuses on our material topics and our approach towards governing them. The policy will outline our goals, objectives, and plans, and is instrumental in achieving our corporate strategy.

The ESG Policy will feed into our building designs, construction, and operations. Targets for energy use, water use, and waste diversion from landfill will be set above industry standards, which will steer us on our decarbonization journey. Urban planning principles work in harmony with the direction of the sun and wind, enhancing outdoor comfort to promote walkability and social interaction. Use of green construction materials reduces environmental impacts and improves the health and well-being of building occupants.

Reporting our environmental, social, and governance (ESG) performance to our stakeholders is a top priority in our sustainability agenda. It is also paramount that the information we disclose in our

report is accurate and relevant. Our ESG data is sourced from different departments across our organization and is governed by and reported to executive management and the board. We ensure that the information we gather is standardized and aligned with the Global Reporting Initiative (GRI) framework.

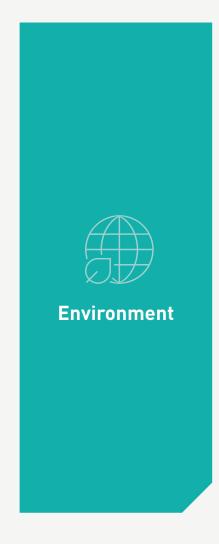
We have dedicated leaders within our organization for our reporting segments that ensure material ESG information is considered and captured throughout our operations. We work with our leaders and departments to measure and improve our ESG performance by ensuring that our systems, policies, and guidelines are in place. All relevant personnel closely monitor our data collection, the efficiency of our action plans, and our mechanisms for identifying ESG risks. Should there be opportunities for improvement, we work with our teams and discuss any potential improvements to implement. This enables us to continuously improve and enhance our operations and address ESG performance challenges as they arise.





## Our **ESG Goals**

We have set clear and ambitious goals and targets to achieve our sustainability objectives, reflecting Masdar City's commitment to having a positive impact on our stakeholders.





By 2025, we aim to improve our asset portfolio Energy Use Intensity (EUI) measured against ASHRAE baseline to

45 percent reduction





Achieve

### net-zero

by 2050 in our Scope 1, 2, and 3 Emissions



Embodied carbon target for all concrete structure building projects to be below

550 kgC0<sup>2</sup>e/m<sup>2</sup>



## 80 percent

operational waste diversion from landfill for all waste streams by 2030





## Free

guided tours provided to showcase sustainability



### **Partnerships**

with schools and government entities



## Develop and implement

our Sustainable Procurement Guidelines (SPG) by 2023



## **ZERO**

workplace fatalities and injuries on all sites





100 percent

trained on ESG practices



40 percent

Emiratization across the workforce



## **Strong**

established system in place to receive and handle grievances

## Managing Our

## **ESG Performance**

#### **Identifying Our Material Topics**

During 2022, we conducted our first materiality assessment as a distinct entity. For this exercise, we followed the process to determine material topics as outlined in the GRI standards, which is to identify and report on the topics most relevant to our organization and where we can create the largest impact on the environment, society, and economy.

Based on this assessment, we prioritized the impacts of our 16 material topics for Masdar City. The results of this assessment will form the basis of our ESG Policy and will act as a foundation of our ESG reporting journey in the coming years.



- Review of Masdar City's activities and business relationships
- Analysis of relevant ESG topics from peers, international and national standards, and reporting frameworks



- One-on-one interviews with department heads and executive directors
- Facilitation of an online survey for all employees



 Identification of actual and potential impacts, both positive and negative, to create an impact mapping matrix



 Assessment of the significance of the actual and potential impacts based on scale, scope, severity, and likelihood



- Prioritization of material topics based on their significance and stakeholder input
- Validation of topics from leadership



| Material Topics |  | Topic Highlights   | Chapter  | Page    |
|-----------------|--|--|--|---------|
| Environmental   |  |  |  |         |
| Ĉ.              | Climate Action   | <ul> <li>Our high-level commitments and milestones to achieve net-zero</li> <li>Our planned asset- and portfolio-level decarbonization strategies</li> </ul>   | Our Decarbonization<br>Efforts                     | Page 40 |
|                 | GHG Emissions<br>(including embodied<br>carbon)                | <ul> <li>Emissions performance, including our Scope 1, 2, and 3 emissions and emissions intensity</li> <li>Our carbon portfolio and baseline</li> <li>Initiatives towards reducing carbon emissions in our real estate assets and operations</li> </ul>                            | Tackling our<br>Carbon Footprint                   | Page 41 |
|                 | Green Building<br>Materials, Installations<br>& Certifications | <ul> <li>How we contribute to the real estate sector's goals to meet the objectives of the Paris Agreement and net-zero carbon</li> <li>Highlights of our building assets and projects that directly aim to green building standards and net-zero strategies</li> </ul>            | Our Green Portfolio                                | Page 43 |
| { <b>[</b> }}   | Energy Management  | <ul> <li>Energy performance, including electricity consumption and our associated reduction targets</li> <li>Energy intensity levels in our facilities</li> <li>Initiatives in our transition to renewable energy</li> </ul>   | Managing our<br>Energy Performance                 | Page 47 |
|                 | Water Management   | <ul> <li>Management of our water resources and reduction of our environmental impact</li> <li>Water performance, including water consumption water management</li> </ul>   | Securing our<br>Stewardship on<br>Water Management | Page 50 |
|                 | Waste and Hazardous<br>Materials Management                    | <ul> <li>Waste performance, including waste generation and waste diversion</li> <li>Our waste impacts and corresponding actions to reduce waste to landfills in our operations</li> <li>Circular economy principles and their applicability to Masdar City's activities</li> </ul> | Addressing Waste<br>Management                     | Page 52 |



| Material Topics |  | Topic Highlights  | Chapter  | Page    |
|-----------------|--|---|--|---------|
| Social          |  |   |  |         |
|                 | Employment                               | <ul> <li>Our employment performance, including our workforce, new hires, and turnover rates</li> <li>Programs to retain, attract, and enable our employees</li> </ul>   | Attracting and<br>Retaining Our People                 | Page 58 |
|                 | Occupational Health<br>and Safety        | <ul> <li>Health and safety performance, including our OHS Management Plan</li> <li>Initiatives to advance occupational health and safety across our operations</li> </ul>   | Fostering a Safe and<br>Healthy Working<br>Environment | Page 62 |
|                 | Training and Education                   | <ul> <li>Our training and education performance in our workforce</li> <li>Training programs offered in Masdar City to enhance employee knowledge and capacity</li> </ul>  | Enabling Our People                                    | Page 65 |
| <b>8</b> 8      | Local Community<br>Impact and Investment | <ul> <li>Initiatives and programs that support our commitment to empower local communities and key stakeholders</li> <li>Local community engagement programs and corporate social responsibility</li> </ul>                   | Creating Value for the<br>Local Community              | Page 67 |
|                 | Customer Relationship and Management     | <ul> <li>Our customer satisfaction rate</li> <li>Strategies to facilitate productive and positive experiences for our customers</li> <li>Strategies to ensure customer satisfaction with our products and services</li> </ul> | Delivering<br>Exceptional<br>Customer Experience       | Page 70 |
|                 | Sustainable Supply<br>Chain Practices    | <ul> <li>Environmental and social criteria in vendor and supplier selection</li> <li>Our policies and guidelines to embed ESG in the supply chain</li> </ul>  | Sourcing Sustainable<br>Practices                      | Page 74 |



| Material Topics |   | Topic Highlights  | Chapter   | Page    |  |
|-----------------|---|---|---|---------|--|
| Governance      |   |   |   |         |  |
|                 | Corporate<br>Governance                         | How we ensure the highest professional integrity and ethical practices in the conduct   | Our Leadership  | Page 78 |  |
|                 |   | of our business ◆ Our policies and guidelines that hold accountability and ensure our compliance  | Safeguarding Integrity<br>and Ethical Business<br>Conduct | Page 84 |  |
|                 | Investments<br>in Sustainable<br>Infrastructure | <ul> <li>Initiatives to safeguard quality, promote sustainability, and support Masdar City's development</li> <li>Investments in sustainable real estate assets and portfolio</li> </ul>              | Fostering   | Page 87 |  |
|                 | Economic<br>Performance                         | <ul> <li>Our contribution to UAE's economy and the real estate market</li> <li>Actions to support the development Masdar City's real estate portfolio and local economic activities</li> </ul>        | Sustainable Finance and Economic Growth                   |         |  |
|                 | Digital Transformation and Innovation           | <ul> <li>How we strengthen our position in the region as a hub for innovation and digital transformation</li> <li>Our technological solutions and updates of our IT systems infrastructure</li> </ul> | Innovating Today<br>for a Sustainable<br>Tomorrow         | Page 90 |  |

## Our

## **Stakeholder Engagement**

We recognize the importance of engaging in an active dialogue with our internal and external stakeholders. Through stakeholder engagement exercises, we are able to capture their concerns, requirements, and expectations. We have categorized our stakeholders into various groups and have gathered their feedback and key discussion points that were raised.

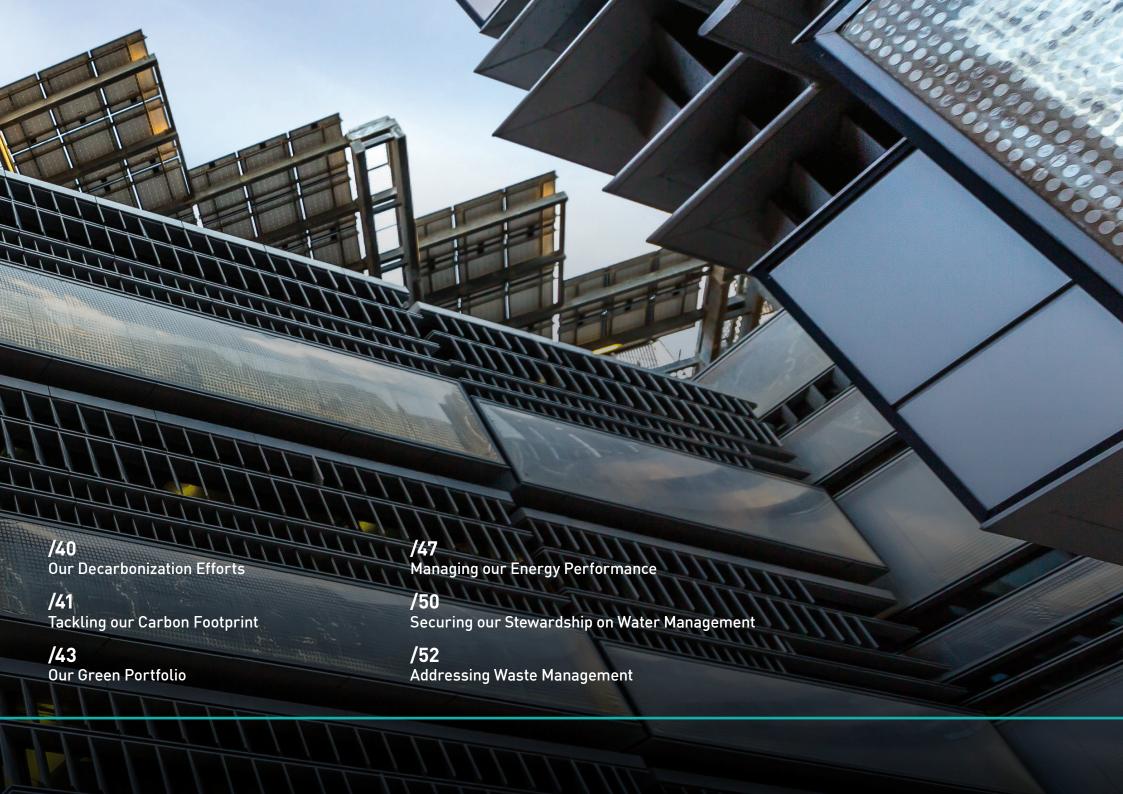
| Stakeholder<br>Group                    | Key Issues and Discussion Points   | Engagement Channels and Programs  |  |  |  |
|---|--|---|--|--|--|
| Business Partne                         | Business Partners  |   |  |  |  |
|   | <ul> <li>Expanding our portfolio</li> <li>Increased investment in green initiatives/buildings</li> </ul> | <ul><li>Virtual and in-person meetings</li><li>News coverage, press, and media</li></ul>                  | <ul><li>Exhibitions and events</li><li>Corporate delegations</li></ul> |  |  |
| Civil Society Org                       | Civil Society Organizations  |   |  |  |  |
| \$\&\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | <ul> <li>Alignment with public policy and regulation</li> <li>Stakeholder satisfaction</li> </ul>        | • Organization representatives  | <ul><li>Social media</li><li>Corporate website</li></ul>               |  |  |
| Consumers                               |  |   |  |  |  |
|   | <ul> <li>Promoting a positive user experience</li> <li>Enhancing accessibility</li> </ul>                | <ul> <li>Dedicated site-level community<br/>management and tenant<br/>engagement professionals</li> </ul> | • Events   |  |  |

| Stakeholder<br>Group | Key Issues and Discussion Points  | Engagement Channels and Programs  |   |  |  |
|----------------------|---|---|---|--|--|
| Customers            |   |   |   |  |  |
| NS/                  | <ul> <li>Communicating available business packages</li> <li>Ensuring customer satisfaction</li> <li>Enhancing accessibility</li> </ul>  | <ul><li>Customer satisfaciton surveys</li><li>Social media</li></ul>  | <ul><li>Corporate website</li><li>Townhall events</li><li>Masdar City mobile app</li></ul>        |  |  |
| Employees and        | other Workers   |   |   |  |  |
|                      | <ul> <li>Creating a safe space to disclose unethical behavior</li> <li>Providing relevant training, human capital, and health and safety measures and preparedness</li> <li>Initiatives to promote diversity and inclusion</li> </ul> | <ul><li>Employee engagement survey</li><li>Training and workshops</li></ul>   | <ul><li>Townhall events</li><li>Online portals</li><li>Code of Conduct</li></ul>                  |  |  |
| Government           |   |   |   |  |  |
|                      | <ul> <li>◆ Alignment with national policies and regulations, alignment with UAE's Energy<br/>Strategy and net-zero Strategy</li> </ul>  | <ul> <li>Through government officials,<br/>government liaisons, heads of<br/>state, ambassadors, and diplomats</li> </ul> | <ul> <li>National media and<br/>regulators</li> <li>Virtual and In-person<br/>meetings</li> </ul> |  |  |
| Local Communit       | Local Community   |   |   |  |  |
|                      | <ul> <li>CSR initiatives to enhance the community</li> <li>Ensuring the local community is not negatively impacted and mitigating potential risks</li> <li>Job creation opportunities</li> </ul>                                      | ◆ The Festival at Masdar City   | ◆ Social media  |  |  |

| Stakeholder<br>Group                    | Key Issues and Discussion Points  | Engagement Channels and Programs  |   |  |  |
|---|---|---|---|--|--|
| Non-Governmental Organizations          |   |   |   |  |  |
|   | <ul> <li>Partnership opportunities</li> <li>Conducting studies and assurance (e.g., environmental, and social impact assessments (ESIA))</li> </ul> | <ul> <li>Conferences, events, and exhibitions</li> </ul>                                | <ul> <li>Newsletters, press<br/>releases and media</li> </ul>                       |  |  |
| Shareholders ar                         | nd Other Investors  |   |   |  |  |
| (S. | <ul> <li>Sustainable initiatives and opportunities for green investment</li> <li>Alignment with ESG policies and strategy</li> </ul>                | <ul><li>Virtual and in-person meetings</li><li>Conferences</li><li>ESG Report</li></ul> | <ul><li>Press releases</li><li>E-mail communications</li><li>Social media</li></ul> |  |  |
| Suppliers                               |   |   |   |  |  |
|   | <ul> <li>Communicate ESG policies to ensure alignment</li> <li>Enforcing Supplier Code of Conduct</li> </ul>  | <ul> <li>Newsletters, physical visits and meetings, events</li> </ul>                   |   |  |  |
| Vulnerable Groups                       |   |   |   |  |  |
|   | <ul><li>CSR initiatives</li><li>Work packages</li></ul>   | <ul> <li>Community outreach<br/>programs</li> </ul>                                     | <ul><li>Corporate website</li><li>ESG report</li></ul>                              |  |  |







### Our

### **Decarbonization Efforts**

**By 2025,** we will:

- Complete the construction of four net-zero energy buildings
- Increase the area of community parks to over 230,000m<sup>2</sup>

In 2023, we will complete our net-zero pathway, which will set out the milestones for operations and key metrics on our journey to achieving net-zero by 2050. Currently, we are working to define our net-zero milestones that will cover our Scope 1, 2, and 3 emissions. Our baseline carbon footprint is derived from 2019 data. (For more details: See Tackling Our Carbon Footprint).

To achieve our targets, we intend to implement a variety of asset- and portfolio-level decarbonization initiatives such as:

- Carbon measurement and verification
- Operational efficiency
- Tenant engagement and management
- On-site renewable energy facilities
- Acquisitions, new developments, and major renovations to include embodied carbon data
- Use of on-site renewable energy

**By 2050,** we will:

- Achieve net-zero carbon emissions in all our operations
- Disclose and offset 100 percent of the upfront embodied carbon emissions impacts associated with project materials and construction

For our new buildings, we aim to define net-zero carbon from the International Living Future Institute (ILFI) Zero Carbon (ZC) Certification, a worldwide zero carbon standard for buildings with high energy efficiency standards designed and operated to fully account for their carbon emissions impacts. The ILFI ZC standard requires that embodied carbon emissions of primary materials of new buildings must be tracked and reduced by a minimum of 10 percent compared to a baseline building of equivalent size, function, and energy performance. We will be using this framework to conduct initial net-zero and zero-carbon analyses across our portfolio.



# Tackling Our Carbon Footprint

#### In 2022, we achieved:

- 53 percent reduction in Scope 1 emissions (vs 2019 emissions) = equivalent to taking 56 gasoline-powered vehicles off the road
- 4,810 tCO<sub>2</sub>e offset from power generated from renewable sources = equivalent to taking 1,045 gasoline-powered vehicles off the road

As one of the world's first low-carbon cities, we have always taken steps to monitor and manage our carbon footprint in order to realize our goals to achieve net-zero by 2050. Hence, an understanding of our carbon footprint has been crucial for us to drive our progress and help achieve this goal.

As part of our actions to understand our impact, we have estimated the carbon footprint of our entire portfolio, which includes information on emissions from both landlord and tenant spaces in buildings such as the International Renewable Energy Agency (IRENA), Incubator, Siemens Energy, and Tabreed, including their indirect emissions. Energy consumption data are all actual consumption taken from meters. Regional emissions factors were then applied to convert consumption into carbon emissions equivalent  $\{CO_2e\}$ .

### **Emissions of Masdar City's Assets**

| Source   | 2021      | 2022      |
|--|-----------|-----------|
| Scope 1 Emissions (tCO <sub>2</sub> e)   |           |           |
| Emissions from Stationary Combustion Sources                                   | 150.10    | 150.66    |
| Emissions from Mobile Sources  | -         | -         |
| Emissions from Fugitive Sources (Refrigeration and Air Conditioning Equipment) | 75.70     | 75.68     |
| Emissions from Fugitive Sources (Fire Suppression)                             | 0.60      | 0.58      |
| Total Scope 1 Emissions (tCO₂e) (Infrastructure + Buildings)                   | 226.40    | 226.92    |
| Scope 2 Emissions (tCO <sub>2</sub> e)   |           |           |
| Purchased Electricity  | 2,407.30  | 2,210.25  |
| Purchased Cooling  | 256.51    | 267.29    |
| Total Scope 2 Emissions (tCO₂e) (Infrastructure + Buildings)                   | 2,663.81  | 2,477.54  |
| Total Scope 1 and 2 Emissions  | 2,890.21  | 2,704.46  |
| Scope 3 Emissions (tCO <sub>2</sub> e)   |           |           |
| Tenant Purchased Electricity   | 6,559.00  | 7,366.10  |
| Tenant Purchased Cooling   | 2,904.02  | 2,938.64  |
| Water Consumption  | 1,868.20  | 2,136.84  |
| Waste Generation   | 187.00    | 194.60    |
| Total Scope 3 Emissions (tCO₂e) (Infrastructure + Buildings)                   | 11,518.22 | 12,636.18 |
| Emissions Intensity for Total Gross Floor Area (kgCO <sub>2</sub> e/m²/year)   | 61.45     | 65.29     |

Note 1: Scope 1 emissions include 16 buildings (15 buildings in 2021) and infrastructure owned and operated by Masdar City, which includes buildings that are leased fully and operated by Masdar City

Note 2: Scope 2 and 3 emissions include 16 buildings [15 buildings in 2021] and infrastructure owned and operated by Masdar City

Note 3: Scope 3 emissions from purchased electricity, cooling, and water

Note 4: Scope 3 emissions from waste generated with recycling

Note 5: Purchased Electricity and Cooling CO2 Emissions Factor based on EWEC (2018)

Note 6: Waste Generation CO2 Emissions Factor based on BEIS (2022)

We have also measured the embodied carbon of our self-developed projects beginning with the construction of the Mohamed bin Zayed University of Artificial Intelligence. This information was generated from the best data and emission factors available. Due to the nature of the acquisition and construction of certain buildings, not all of the buildings in Masdar City have been accounted for. Up to 2022, our embodied carbon figures are broken down in the table below:

| Building  | Gross<br>Floor Area<br>(m²) | Embodied<br>Carbon<br>(kgCO <sub>2</sub> e) | Embodied<br>Carbon Intensity<br>(kgCO <sub>2</sub> e/m²) | Note   |
|---|-----------------------------|---|--|--|
| Incubator   | 9,709                       | 10,485,720                                  | 1,080  | Steel structural system and raised podium structure  |
| Siemens Energy  | 22,800                      | 11,511,600                                  | 505  | Surface parking  |
| International Renewable Energy Agency (IRENA)           | 32,064                      | 21,184,000                                  | 661  | Surface parking  |
| UAE Space Agency  | 4,864                       | 2,594,652                                   | 533  | The UAE Space Agency was an already developed building that was relocated from Milan Expo 2015 |
| ADQCC HQ and Central Residences                         | 38,852                      | 27,771,415                                  | 715  | Including the parking structure  |
| Eco Residences 2  | 57,513                      | 41,110,301                                  | 715  | Including the parking structure  |
| Advanced Technology & Research Council                  | 5,547                       | 2,363,760                                   | 426  | Surface parking  |
| Mohamed bin Zayed University of Artificial Intelligence | 79,162                      | 43,758,124                                  | 553  | Includes raised podium structure   |
| Field Station   | 524                         | 355,796                                     | 679  | Surface parking  |

As we decarbonize our assets and value chain, the data and methodology that drive our climate actions will evolve and improve each year. Beginning in 2019, we have computed our Scope 1, 2, and 3 emissions and have reported on our relevant emissions as defined by the GHG protocol. As techniques to calculate emissions improve, we will apply these practices to account for previous years' calculations to further gain understanding of our emissions across all our assets. Going forward, we will focus on increasing the accuracy and granularity of our data, and we will continue reporting and updating our emissions boundaries as our business grows on our path to net-zero emissions.

### Our

### **Green Portfolio**

#### Our Portfolio Covers:

- 16 Assets with Green Building Certifications
- 1 net-zero Energy Building completed
- 3 net-zero Energy Buildings under construction
  - Tabreed
  - Within the Masdar City Square Project Masdar City Square HQ Office Building - ILFI Zero Energy Certification
  - Within the Link project Co-Lab Building ILFI Zero Energy Certification
- 59,000 m2 of community parks

Masdar City is home to one of the largest clusters of LEED Platinum buildings in the world. Our buildings act as a real-time laboratory to monitor and study how cities use, conserve, and share resources.

We recognize that to meet the objectives of the Paris Agreement by 2050, it is essential to decarbonize the building sector. To contribute to this endeavor, we have established minimum environmental requirements and set standards for energy, water, waste, carbon emissions, and green building rating systems for each property development. These requirements are already complied with from the planning and design phases of the project.

Combining passive and intelligent design, the buildings' energy and water demands are designed to be at least 40 percent lower than baselines set by LEED and Estidama Pearl Building Rating System (PBRS). Furthermore, our buildings must meet a

minimum Estidama PBRS certification of 3 pearls. Construction adopts green materials including low-carbon cement and 90 percent recycled aluminum and other locally sourced and verified materials.



### **Our Alignment with Green Building Certification Systems**



Estidama is a sustainable building design methodology that can be used to develop and govern towns and cities. It is a certification system designed by Abu Dhabi Urban Planning Council (UPC) and is a vital component of the "Abu Dhabi Vision 2030" to build the emirate in accordance with cutting-edge green standards. It seeks to establish a framework for monitoring sustainability performance in planning and building phases.

Within Estidama, Pearl Building Rating System (PBRS) is a green building rating system that is utilized to evaluate sustainable building development practices in Abu Dhabi and covers all aspects of sustainability which are, energy use, water use, materials use, indoor and outdoor environment, and innovation strategies. Five certification levels could be pursued to obtain the Estidama certification.



LEED, or Leadership in Energy and Environmental Design, is one of the most commonly used environmental classification system in the world. The system evaluates and rates the overall environmental impact of buildings.

To achieve LEED certification, a project earns points by adhering to prerequisites and credits that address carbon, energy, water, waste, transportation, materials, health, and indoor environmental quality. Projects go through a verification and review process by GBCI and are awarded points that correspond to a level of LEED certification: Certified (40-49 points), Silver (50-59 points), Gold (60-79 points) and Platinum (80+ points).



The ILFI Zero Energy Standard, a third-party certification program for buildings that have achieved net-zero energy. The standard is designed to help buildings reduce their environmental impact and contribute to a more sustainable future.

Achieving ILFI Zero Energy certification means 100 percent of the building's energy needs on a net annual basis must be supplied by on-site energy. No combustion on site is allowed.



The WELL Building Standard is a performance-based system for measuring, certifying, and monitoring features of the built environment that impact human health and wellbeing, through seven core areas: air, water, nourishment, light, fitness, comfort, and mind.

WELL Certification helps organizations monitor ongoing building performance and collect employee feedback, enabling them to take a data-driven approach to their health and well-being efforts. Spaces can become WELL certified by achieving a defined score in each of the above mentioned seven 'Core Concept' categories. WELL certification includes the submission of project documentation and onsite audit, which can result in the award of a Silver, Gold or Platinum standard.



The LEED Zero is a certification program from the U.S. Green Building Council (USGBC) that recognizes buildings that have achieved net-zero carbon emissions. It is a voluntary program, but it is becoming increasingly important as businesses and organizations look for ways to reduce their environmental impact.

Achieving a LEED Zero Certification means your building's annual carbon balance is zero. A zero balance means that you have offset all emissions, measured in carbon dioxide equivalent (CO2e), resulting from your building's operations.

### **Key Highlights**

#### MASDAR CITY SQUARE (MC2)

Masdar City's renewable energy hub has launched a new project that directly contributes to the UAE's net-zero by 2050 target. Masdar City Square aims to host businesses that will operate in harmony with the environment. Work began in early 2022 and is scheduled for completion in 2024. The development will include seven single- and multi-tenant office buildings and a parking facility. Six of the buildings will have the highest green construction specifications while the Masdar City Square HQ building will be Abu Dhabi's first net-zero energy office building, which means that the property will use no more energy than it produces through energy efficiency-focused design and systems and renewable energy processes.



#### The Link

The Link will be constructed to LEED Platinum, WELL Gold, 4 Pearl PBRS Estidama, and LEED SmartPark Silver standards. One of the buildings, the Co-Lab Building, will be net-zero energy, with planned annual energy reduction of up to 117 percent. It will use energy-efficient structures as well as sustainability features including high-efficiency heating, ventilation and cooling, energy monitoring, and A star-rated appliances. It will be powered by renewable energy. In addition to the net-zero energy co-lab building that will house both office and residential space, The Link will feature four other low-carbon buildings that will include event space, outdoor plazas, shaded courtyards, recreational and fitness facilities, and retail.



#### NZ1, A Net-Zero Energy Office Space

As one of the first net-zero energy commercial buildings in the country, NZ1 is defined by sustainability and innovative technologies with a modern office space design. NZ1 is on track to be awarded with Estidama PBRS - 04 Pearls, LEED v4.0 – Platinum, and WELL V2.0 – Gold certifications.



### Sustainability Program for New Construction and Reconstruction

Starting in 2014, we set the following minimum environmental requirements applied to all buildings, including:

- 40 percent reduction in energy demand (baseline ASHRAE 90.1:2007)
- 40 percent reduction in potable water (methodology Estidama PBRS Water Calculator)
- Limiting irrigation water usage to 2.0 liters /m²/day (methodology Estidama PBRS)
- 70 percent of demolition and construction waste is recycled or salvaged (methodology Estidama PBRS)
- 60 percent of operation waste is diverted from landfills and incineration (50 percent for Multi-Residential Buildings) (methodology Estidama PBRS)
- Target 650 KgCo<sub>2</sub>e/m<sup>2</sup> embodied carbon for steel structure buildings and 550 KgCO<sub>2</sub>e/m<sup>2</sup> for concrete structure buildings

These established environmental requirements are tracked by our design consultants and contractors and audited by the Abu Dhabi Department of Municipal Affairs and Transport (DMT) before Estidama Pearl Building Rating certification.

### Managing Our

### **Energy Performance**

### During 2022, we achieved:

- 21,188,480 kWh energy savings (against ASHRAE baseline) = avoiding 7,416 tCO₂e, equivalent to taking 1,610 gasoline-powered vehicles off the road
- 13,743,260 kWh of renewable energy was generated = offsetting 4,810 tCO₂e, equivalent to taking 1,045 gasoline-powered vehicles off the road
- 38.4 percent energy use intensity (EUI) reduction (against ASHRAE baseline)

#### Our Goals:

- By 2025, we aim to improve our asset portfolio EUI measured against ASHRAE baseline, from 38.4 percent reduction to above 45 percent reduction
- By 2025, we will further improve energysaving efforts and continue exploring renewable energy options

Managing our energy is one of our top priorities, which we are working towards by:

- Continuously working on reducing our energy use which is a significant aspect of our operations
- Constantly aiming to improve our energy management performance by transitioning to cleaner energy sources and reducing our impact
- Aligning our energy management policies, programs, and initiatives with local, national, and international goals and ambitions, such as the UAE Energy Strategy 2050 and UAE's net-zero Strategy 2050

To help provide better context on our energy efficiency, we look at our energy use intensity metric, which is defined as the ratio of the total electricity consumption from our buildings divided by total building area.

The total building area, reported in square meters (based on gross floor area as defined by Abu Dhabi City Municipality), covers the floor area of the sixteen (16) buildings across ten (10) plots, namely:

- ◆ Incubator
- Siemens Energy
- ◆ International Renewable Energy Agency
- Tabreed (National Cooling Company)
- ◆ Eco Residences
- ◆ UAE Space Agency
- ◆ ADQCC HQ and Central Residences
- Eco Residences 2
- Advanced Technology & Research Council (ATRC)
- Active at Masdar City

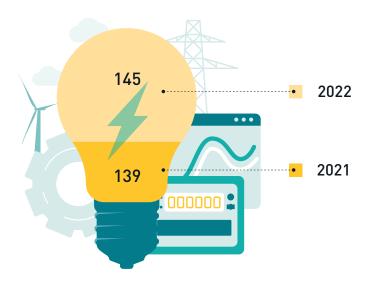


### Total Energy Consumption and Generation, kWh



2022

### Energy Use Intensity from Electricity and Cooling (kWh/m²/year)



The energy intensity of the Eco-Villa has not been measured because it was built as a pilot project and has since been re-purposed for research and development use.

In 2022, we generated 13,743,260 kWh of renewable energy. This is equivalent to 37.5 percent of our total non-renewable energy consumption.

Non-renewable Consumption

The sources of our renewable energy electricity include

- ◆ The 10 MW photovoltaic (PV) farm
- The 1000 m² PV panels located in the IRENA Headquarters
- Central Park Phase 1

13,743,260

Renewable Generation

Central Park Phase 2

Note 1: Non-renewable sources derived from total energy and cooling purchased

Note 2: The energy consumption only included buildings and infrastructure owned and operated by Masdar City, which includes buildings that are leased fully and operated by Masdar City.

Note 3: The computation for total energy consumption includes 16 buildings (15 buildings in 2021) and infrastructure



2021

There was a slight increase in electricity consumption by 5.4 percent in 2022 compared to the previous year, mainly attributed to the increase in the number of people returning to the office after the COVID-19 pandemic. We also saw a slight decrease in renewable energy use from 30 percent in 2021 to 27 percent in 2022. Hence, energy reductions from energy initiatives were not realized this year. However, we are looking at enhancing and subsequently implementing our energy mix into our operations to increase energy efficiency and improve our energy performance, including our energy intensity ratio.

### **Key Highlights**

#### Emerge signs agreement on Masdar City solar plant for Khazna Data Centers

Khazna Data Centers, the Middle East, and North Africa region's largest network of hyperscale data centers, and the Masdar-EDF joint venture Emerge have collaborated to build a ground-mounted solar photovoltaic (PV) plant to power Khazna's new Masdar City data center. The plant, which has been given an Abu Dhabi Department of Energy license for solar photovoltaic (PV) self-regulating generation, will supply power to the Khazna Abu Dhabi 6 (AUH 6) facility which is currently under construction in Masdar City. It will have an installed capacity of 7 megawatts peak (MWp). As the demand for data and the increased reliance on data and the rise of IoT, data centers have had to rapidly expand their infrastructure, which makes them among the world's largest energy consumers. By producing and managing a consistent source of renewable energy, Emerge will allow Khazna to focus on providing high-quality data center services to its customers in Masdar City and beyond.

### The following buildings use solar energy for hot water production:

- Mohamed bin Zayed University of Artificial Intelligence
- Incubato
- Siemens Energy

- IRFNA
- ADQCC HQ
- Eco Residences
- Central Residences
- Eco Residences 2



### Securing Our

### **Stewardship on Water Management**

#### During 2022, we achieved:

- 28.7 percent savings in water consumption across our building portfolio (against Estidama PBRS baselinel
- 67,376 m3 water savings across our building portfolio (against Estidama PBRS baseline)
- 774.8 tCO<sub>2</sub>e avoided = equivalent to taking 168 gasoline-powered vehicles off the road

#### Our Commitments:

- By 2025, we will achieve 15 percent reduction in our asset portfolio water use intensity against our 2019 performance
- Further advancement of process automation which will assist in the accelerated identification of leaks, which in turn, prevents wastage and promotes the rational use of
- Strengthen the daily inspection, maintenance, and management of water-consuming equipment, and deal with the problems of leaking and dripping promptly

As we are located in a region with limited water resources, the impacts of climate change are expected to make the region drier and hotter. This is compounded by the increasing urban population that significantly puts a strain on the water supply. Hence, responsibly managing our water resources is of prime importance. With this, we are committed to proper water resource management to meet our water needs by implementing several initiatives and reducing our environmental impacts. This includes optimizing water efficiency in our operations, thus minimizing consumption and wastewater across our projects through sophisticated water treatment processes to ensure limited discharge into the natural environment.

Our water supply is supplied from water utilities. Hence, we interact with water mainly through water consumption from our units. To keep a close eye on water consumption and prevent further depletion of water resources from our water consumption, we use environmental management processes and our recent advancements in its automation have allowed us to facilitate and streamline the identification of leaks and prevent wastage. In 2023/2024, we aim to conduct a water resources assessment to determine our water-related impacts, including the impacts of our consumption on areas with water stress, and better understand how we manage our water resources.







**Buildings** 2022 2021

148,225 m<sup>3</sup> 167,105 m<sup>3</sup>



**Total Water Consumption** from all areas

2021 2022

162,452 m<sup>3</sup> 185,812 m<sup>3</sup>

Note: Only includes buildings, parks and infrastructure under Masdar City operations.

In 2022, our water footprint totaled 185,812 cubic meters, 14.4 percent greater than in 2021. This was primarily due to an increase in water consumption linked to increased occupancy during the year, as previously mentioned. We are constantly working on reducing water consumption within our facilities and demonstrating strong practices for others in the industry and beyond. These initiatives include:

- Collection of condensate water from air conditioning systems for landscape irrigation use
- Recycling of gray water for irrigation use
- Installation of water-efficient equipment/appliances such as low flow sanitary fixtures

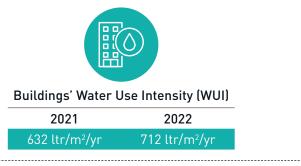
To help provide better context on our water efficiency, we look at our water use intensity metric, which is defined as the ratio of the total water consumption from our buildings divided by total building area. The total building area, reported in square meters (based on gross floor area as defined by Abu Dhabi City Municipality), covers the floor area of the sixteen buildings across ten plots, namely:

- ◆ Incubator
- Siemens Energy
- ◆ International Renewable Energy Agency
- ◆ Tabreed (National Cooling Company)
- ◆ Eco Residences
- UAE Space Agency
- ◆ ADQCC HQ and Central Residences
- Eco Residences 2
- Advanced Technology & Research Council (ATRC)
- Active at Masdar City

The water use intensity of the Eco-villa has not been considered because it was built as a pilot project that has since been re-purposed for research and development use.

We have set minimum environmental requirements based on Estidama PBRS for water resource management, which are applied to all buildings in Masdar City since 2014. The minimum requirements:

- 40 percent reduction in potable water
- Limiting irrigation water usage to 2.0 liters /m²/day



Note: Only includes buildings under Masdar City operations.

In 2022, our water use intensity (WUI) for buildings was 712 ltr/m2/yr. This was 12.6 percent greater than in 2021. However, this was 7.4 percent lower than in 2019 when the WUI was 769 ltr/m²/yr. We also aim to measure our total water consumption from all areas with water stress in 2023/2024, including any changes in water storage based on the results of our water resource assessment.

For the future ahead, we are expecting that the advances in process automation and our strengthened daily inspections, maintenance, and management of water consuming equipment would promote rational use of water and help conserve water resources.

In 2023, we will commence phasing out the use of bottled water in our offices. This will be replaced with filtered water, glass jugs, flasks, and cups. As a result, this will have the effect of increasing purchased water consumption from drinking and washing.

### Addressing

### **Waste Management**

#### In 2022:

- 66 percent waste reduction through recycling vs business as usual
- 417.5 tCO<sub>2</sub>e of emissions avoided from recycling = equivalent to taking 90 gasolinepowered vehicles off the road
- 5 percent waste reduction (vs 2019)
- 90 percent of construction waste diverted from landfill

#### **Our Long-Term Commitments:**

- Embed circular economy principles into the procurement process, integrating the principles into requests for proposals, tenders, and contracts
- 80 percent diversion from landfill by 2030 for all waste streams

With the goal of becoming a zero-waste city, we make concerted efforts to reduce the amount of waste we generate, minimize our negative environmental impacts from carbon emissions, pollution, and potential human health risks to conserve resources, improve public health, and achieve an overall more sustainable city to live in.

Our upstream waste constitutes waste from construction, extension, and reconstruction activities of our buildings, while waste disposed by our tenants and from our daily operations such as food waste, glass, metals and e-waste, plastic and paper waste constitute our downstream waste. To manage our impacts from our upstream waste, we are systematically implementing waste reduction activities that adopt innovative design and construction methods to reduce on-site waste, such as:

- Employment of prefabrication
- Employment of modular design

For example, both the Eco Residence and Eco Residences 2 employ modular prefabricated bathrooms in their construction.

Meanwhile, we increase our waste diverted from landfill by increasing onsite recycling rates. We also implement composting programs to ensure a closed loop and promote circularity. Across these operations, a facilities management team compiles waste data across our operations and site to ensure our effective waste management.



### **Key Highlights**

### **Waste Management Facility**

We have opened an integrated environmentally friendly waste management facility on the project site to help us meet our ambitious waste diversion goal. While managing and collecting waste generated by our construction activities, administrative offices, and residential facilities, the facility adheres to our waste management hierarchy to which all our contractors must collaborate with. Our waste management facility ensures the

### **Central Composting Facility**

in 2020. It aims to process up to 270 kg of food waste per day, using a state-of-the-art closed-loop system to convert food waste into compost, which is then used to fertilize plants in Masdar City. The facility is managed by Masdar City Facilities Management (MCF).

### tor agriculture

#### **Design and Construction Methods to Reduce Waste**

We have implemented minimum environmental requirements for all our buildings, including:



### 70 percent

of demolition and construction waste is recycled or salvaged



### 60 percent

of operation waste is diverted from landfills and incineration (50 percent for multi-residential buildings)

nsform food waste rient rich soil

#### **Waste Generation**

| Reporting requirements   | Unit | 2021 | 2022  |
|--|------|------|-------|
| Total weight of waste generated, and a breakdown of this total by composition of the waste | Ton  | 979  | 1,158 |
| Total weight of non-hazardous waste  | Ton  | 979  | 1,158 |
| General (non-recyclable)   |      | 387  | 398   |
| Paper and cardboard  |      | 30   | 33    |
| Glass  |      | 0    | 9     |
| Metal  |      | 5    | 57    |
| Food, wood, and garden waste   |      | 547  | 652   |
| Other (plastic and hard plastics)  |      | 9    | 9     |
| Total weight of hazardous waste  | Ton  | 0    | 0     |
| Other (batteries, bulbs and florescent and CRT tube)                                       |      | 0    | 0     |

### **Waste Diversion**

| Reporting requirements  | Unit | 2021 | 2022 |
|---|------|------|------|
| Total weight of waste diverted from disposal, and a breakdown of this total by the composition of the waste | Ton  | 592  | 760  |
| Total weight of non-hazardous waste (100 percent through recycling)   | Ton  | 592  | 760  |
| Total weight of hazardous waste   | Ton  | 0    | 0    |

### **Waste Disposal**

| Reporting requirements  | Unit | 2021 | 2022 |
|---|------|------|------|
| Total weight of waste directed to disposal, and a breakdown of this total by composition of the waste | Ton  | 387  | 398  |
| Non-hazardous waste (100 percent through landfilling)   | Ton  | 387  | 398  |

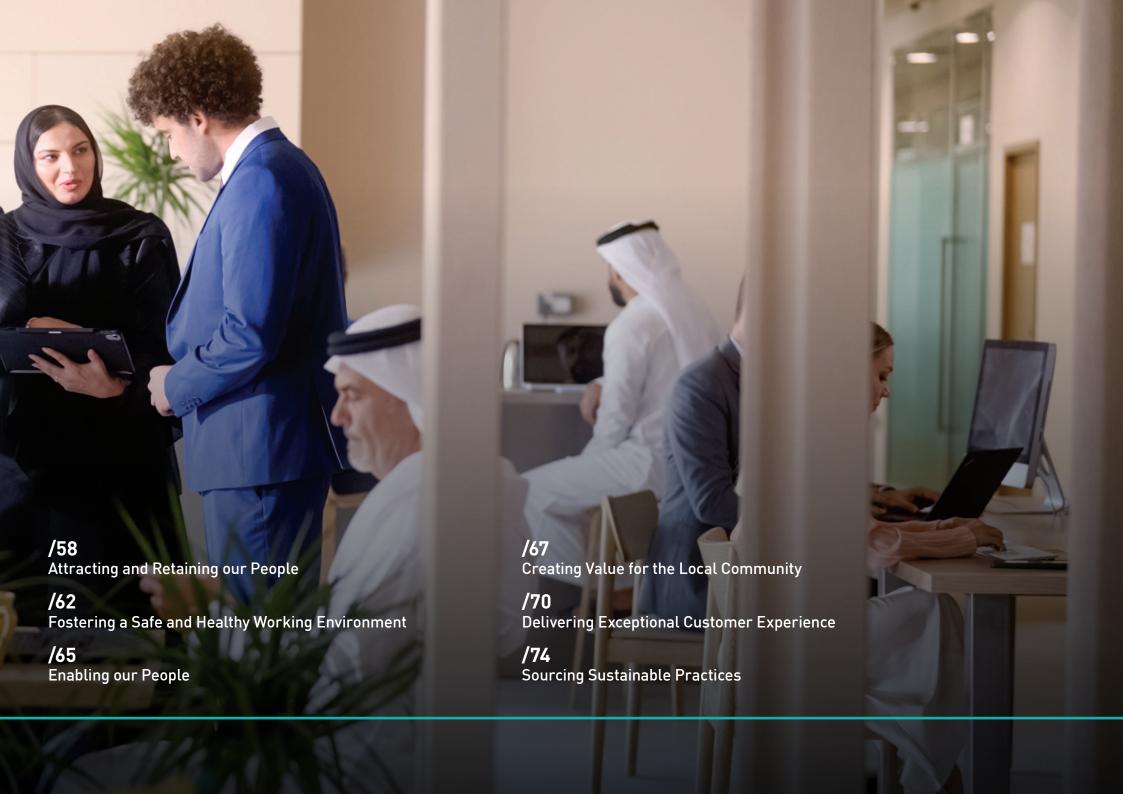
Throughout 2022, our operations generated 1,158 tons of waste associated with our operations, an 18 percent increase from 2021. Since the improved conditions in the city post COVID-19 restrictions, this figure reflects the return of normal operations and the addition of new businesses in the City. We have also added to the scope of our waste collection which includes landscaping. With this, an increase in reported figures has been observed. Through our recycling initiatives, 760 and 398 tons of waste has been diverted, accounting for 66 percent and 34 percent of the total waste generated, respectively.

We are currently working on enhancing our waste performance in our facilities by implementing circular economy principles within our operations. We will continue to work with our employees, tenants, and customers to help achieve our waste management targets.

By 2030, we are aiming for 80 percent waste diversion in all our waste streams.







### Attracting and Retaining **Our People**

#### Our Commitments:

- Provide equal employment opportunities
- Expand our human capital development programs
- Expand the avenues in which we attract and retain new
- Expand the mental health and well-being of our

Our employees, residents, workers, and visitors are the heart of Masdar City. As our business continues to expand, we aim to attract the best talent in the region, providing competitive compensation and benefits, identifying initiatives for employee retention, and promoting professional development for our people and new joiners. We are focused on improving work-life balance and the continuous enhancement of employee wellness benefits, as well as providing appropriate learning and development courses.



| <b>Total Employees</b> |  |  |
|------------------------|--|--|
| 2022                   |  |  |
| 56                     |  |  |
|                        |  |  |



2021

15 percent 11 percent

2022

In 2022, UAE Nationals 47.3 percent of total up from 45.1 percent in 2021



We have 34 workers who are not employees and whose work is monitored by Masdar City.

We engage and create partnerships with the local high schools and colleges to build awareness and create diverse pipelines through training, mentorship, and job readiness, in which we also provide them attractive and competitive benefits. In 2022, we employed 21 new hires which equates to a 50 percent increase from 2021. Among our new hires over the last two years, 50 percent are women.

|  | 2021 | 2022 |
|--|------|------|
| Total number of new employee hires during the reporting period | 5    | 9    |
| Gender   |      |      |
| Male   | 2    | 5    |
| Female   | 3    | 4    |
| Age group  |      |      |
| Under 30   | 1    | 1    |
| 30 to 50   | 4    | 6    |
| Over 50  | 0    | 2    |
| Region   |      |      |
| UAE  | 5    | 9    |
| Other  | 0    | 0    |

We support the empowerment of the female talent in our organization by providing them with equal career opportunities and supporting them in reaching their full potential. Moving forward, we will continue our path to increase female representation in our workforce and continue to support them through different development and support programs.

### **Our Human Resources Policy**

Our human resources (HR) policy governs our performance when managing Masdar City's human capital strategy. The policy provides a detailed approach to ensure that we observe impartiality and consistency across the organization. The policy was developed in compliance with the UAE Labor Laws and is reviewed every first quarter of the year.

Our HR policy and non-discrimination policies are in place to ensure that our employees are treated fairly and provided with equal career opportunities in the organization.

### **Understanding and Rewarding our Employees**

Masdar City assigns human capital as one of its critical pillars. To better understand the needs of our employees, we participate in an enterprise-wide engagement survey and send interim surveys on specific topics when required. Each business area has dedicated leaders responsible for assisting with the facilitation, review, and implementation of feedback on employee engagement surveys.

It is in our philosophy to reward our employees. The reward and remuneration packages that we provide are directly linked to the employee's performance outcomes. We also ensure that our remuneration remains competitive in the market. In addition to the guaranteed monthly salary, we also extend a comprehensive compensation and benefits package offering that includes housing loans, personal loans, car loans, and education assistance for children. Other additional benefits such as retirement, medical, and health benefits are also included.

9 years average staff turnover

Masdar City also has a 'KAFU' program whereby any employee can nominate another employee(s) for consideration to receive a gift in recognition of upholding the values of Masdar City.

Our employee focused approach has enabled us to have a high retention rate and a nine years average staff turnover. Going forward, we aim to maintain and further improve our employees' experience.

| Breakdown of employees by turnover                                       | 2021      | 2022        |
|--|-----------|-------------|
| Turnover rate ( percent)   | 0 percent | 3.6 percent |
| Total number of employees leaving employment during the reporting period | -         | 2           |
| Gender   |           |             |
| Male   | -         | 0           |
| Female   | -         | 2           |
| Age Group  |           |             |
| Under 30   | -         | -           |
| 30 to 50   | -         | 1           |
| Over 50  | -         | 1           |



### **Parental Leave**

Part of retaining our people is ensuring the most favorable conditions based on their individual circumstances. We offer paid time-off and other parental support and benefits to our employees to care for and bond with their new child and allow them to adjust and enjoy the newest addition to their families.

| Breakdown of our employees by parental leave                           | 2021        | 2022        |  |  |
|--|-------------|-------------|--|--|
| Total number of employees entitled to parental leave                   |             |             |  |  |
| Male   | 31          | 36          |  |  |
| Female   | 12          | 13          |  |  |
| Total number of employees that took parental leave                     |             |             |  |  |
| Male   | -           | 1           |  |  |
| Female   | 3           | 1           |  |  |
| Number of employees that returned to work after parental leave ended   |             |             |  |  |
| Male   | -           | 1           |  |  |
| Female   | 3           | 1           |  |  |
| Return to work and retention rate of employees who took parental leave |             |             |  |  |
| Male   | -           | 100 percent |  |  |
| Female   | 100 percent | 100 percent |  |  |



### **Our Transition from ADFEC to Masdar City**

Upon the split of Masdar City from Abu Dhabi Future Energy Company (ADFEC) in 2022, Masdar City underwent significant changes in terms of organizational and governance structures. This brought about the challenge of ensuring a seamless transition of our employees to the new organization, as well as our human capital activities, including employment and training. We were able to complete all our planned recruitment activities for the year and the year-end performance evaluation cycle, including the promotion and rewards programs. This demonstrates our adaptability to a changing environment and challenging scenarios while maintaining our commitment to support our employees.

# Fostering a Safe and Healthy Working Environment

### Highlights:

- Masdar City and all its departments take the necessary measures to continually improve the Operational safety and health (OSH) of processes, products, and services and maintain the highest levels of OSH performance
- Pursued re-accreditation to ISO 14001, ISO 45001, and ISO 9001 for Masdar City
- Conducted inspections and audits to Masdar City departments and construction contractors and several mock drills

The safety and well-being of our employees are of the utmost priority at Masdar City. We strive to create a healthy and safe working environment for all our people. We are advancing our occupational health and safety programs through multiple enablement and capacity-building initiatives. Our Quality, Health Safety and Environment (QHSE) Division oversees occupational health and safety across our operations to ensure the safe delivery of our projects and safe operation of our completed assets. With the nature of our business and operations, adapting to changes, such as new projects and changes in the scope of work, is critical for our business. We ensure that our health and safety management system is resilient and adaptable to these changes to ensure that all health and safety risks associated are managed and all our workers are protected from harm or danger.

### Our Occupational Health and Safety Management System

Our health and safety management system follows a risk-based approach, which allows us to have a better understanding of the risks in our organization and helps us to plan and identify appropriate measures to address these risks. This also allows us to ensure our compliance with applicable legal and regulatory requirements. We have established an Occupational Safety & Health (OSH) Management Plan which provides details on how we manage worker requirements, risk management activities, and worker's welfare and amenities.

Our health and safety management system, including our associated policies and procedures, complies with Abu Dhabi Federal Law, Abu Dhabi Occupational Safety and Health System Framework of Abu Dhabi Public Health Center (ADPHC), Abu Dhabi's sector regulatory requirements (SRAs), and international standards such as ISO 14001:2015, ISO 45001:2018 and ISO 9001:2015 requirements.

Number of employees and other workers covered by an externally certified system

 2021
 2022

 17,672
 21,463

100 percent

of employees and contractors are covered by an externally certified management system

### Hazard Identification, Risk Assessment, and Incident Investigation

For both routine and non-routine activities, we employ a variety of tools and methods to analyze and control work-related hazards and risks, identify competencies for our safety leaders, and provide unbiased matrix and risk assessments. Our risk assessment process follows the hierarchy of controls – elimination, substitution, engineering controls, administrative controls, and personal protective equipment (PPE) to eliminate or minimize risks to an acceptable level (As Low as Reasonably Practical - ALARP). The outcomes of this process are subject to an annual compliance audit as well as frequent inspections to ensure that all controls are implemented effectively, and continual improvement opportunities are identified.

Employees across functions are selected based on competency to conduct risk assessments.

All incidents will have a root cause analysis and subsequent action plans implemented, which will be used to feed improvements back into our H&S Management System procedures. We disseminate H&S alerts and bulletins to all parties, to educate the organization and project teams on the key findings and outcomes of any incident.

### **Empowering Our Employees**

We have established procedures to encourage our workers to report unsafe acts and conditions in their workplaces to the supervisors and OSH representatives through whichever medium of communication is best for them. They may be done verbally, or through SMS, e-mail, or complaint boxes. They are also empowered with the authority to suspend work where they believe there is a significant risk to their life or the business. In the incident where the danger is also acknowledged by OSH employees, a stop-work notice is issued. The notice can only be removed after necessary correction actions have been verified. To encourage reporting further, we have established a monthly OHS award and incentives scheme for teams with the best OHS reporting.

Our workers are also part of the health and safety committee which meets every quarter to review health and safety related issues and concerns. We believe that

this will aid in promoting cooperation between management and workers, and will generate opportunities for open discussion and provide a real-time understanding of issues. The committee is chaired by a member of the senior management or a person with the delegated authority. All the important discussions and agreements made in the committee meetings are recorded and made available to all relevant stakeholders.

### **Fostering Learning for Our Workers**

We conduct regular training and development programs to establish a culture of health and safety, across the organization and equip employees with the knowledge to develop risk-free behaviors. Within Masdar City, it is mandatory for all our employees, visitors, or anyone who may require access to the work site to undergo health and safety training.

All Masdar City employees receive Quality, Health, Safety, and Environment (QHSE) and use of PPEs training. Elective trainings are also provided for interested employees such as First Aider and Fire Warden training, given through approved training centers in Abu Dhabi. Training requirements are also embedded in our scope of work (SOW) and project requirements in compliance with OSH Construction Management Plan (CMP).



Listed below are several of the trainings that are provided on different health and safety topics for construction project employees:



Use and Care of Personal Protective Equipment



**Permit** to Work **Procedure** 



Manual Handling



Risk Assessment



Chemical Handling Safety



Working at Heights



Scaffolding Safety



**Hot Work Activities** 



Excavation Safety



Equipment Handling

### Our 2022 Health and Safety Performance



Total manhours

2,448,576 2,605,227

2021



mock drills



**ZERO** 

lost-time incidents and reportable accidents



### **ZERO**

fatalities as a result of in 2021 and 2022



**ZERO** 

recorded cases of work-related ill-health for all employees and 2021 and 2022



### **5,369** people

5.212

construction workers

157



fatalities as a result of work-related ill-health for all employees and contractors in 2021 and

### **Protecting Our Workers' Health**

We mandate all our employees and contractors to undergo annual non-occupational medical and health services to obtain health insurance. They are also entitled to obtain any non-occupational medical and health services through their health insurance.

Clinics and first aid facilities are readily available in all project sites, ensuring that all our employees and contractors have immediate access to these facilities. They are encouraged to consult with the medical professionals and first aiders available on-site for work and non-work-related medical inquiries. Whenever urgent and more extensive medical care is required, we provide an ambulance or transportation to the nearest hospital free of charge.

UAE Labor Law and ADPHC have established OSH requirements and guidelines for all projects and construction activities. To ensure our compliance, we provide welfare facilities such as restrooms, drinking water, and ergonomic workstations, amongst others.

# Enabling Our People

#### **Our Commitments:**

- Further develop our training program to deliver bespoke and advanced sustainability training across our business, supporting ESG integration in investment decision-making
- Expanding wellness and engagement training for our employees
- Continuous development of a Training Calendar for our employees

As part of our commitment to our people and the values we uphold in Masdar City, we encourage a culture of continuous learning to improve their knowledge, competency, and performance, by providing them with an environment conducive to learning and one that supports them in obtaining the relevant knowledge, skillsets, and abilities in line with leading practices. This culture of continuous learning also supports Masdar City's vision as the regional hub for research, development, and innovation.

We believe that the professional development of our people is a shared responsibility. The Emiratization and Human Capital department assumes the responsibility of ensuring that we provide sufficient training and learning programs to our people, to support them in their personal and professional development. Our learning and training programs are provided through various channels, via internal and external resources, coaching, and mentorship.

In the future years, we are committed to further developing our training program to deliver more bespoke and advanced sustainability training across our business, supporting ESG integration in investment and decision-making.

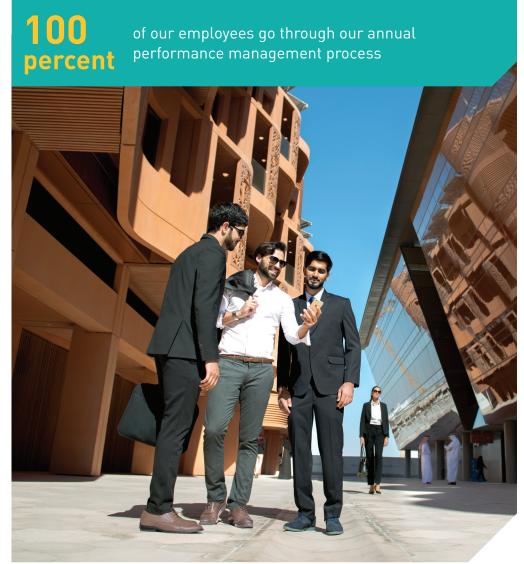
### **Spotlight on Our Training Programs**

We continuously invest in enriching learning experiences for our workforce and constantly strive to help them discover the best opportunities for learning and career growth. For different levels of the organization, we provide targeted development programs that best provide employees with the required skills. These programs are designed to help our employees, managers, and senior leaders develop the skills and knowledge they need to be successful in their roles.

| Average hours of training per year per employee | 2021 | 2022 |
|---|------|------|
| Breakdown by Gender                             |      |      |
| Male  | 17   | 7    |
| Female  | 12   | 5    |
| Breakdown by Position                           |      |      |
| Senior Management                               | 12   | 5    |
| Middle Management                               | 17   | 7    |
| Staff   | 9    | 9    |

### **Annual Performance Reviews**

It is our objective for all our employees across all business units of Masdar City to go through regular performance and career development reviews on an annual basis. Our performance reviews involve the creation of a development plan which translates into training needs relevant to each employee that serves as an input into our training calendar. The appraisal of our employees' performance also allows us to make career and reward decisions at the year-end.



## Creating Value for the Local Community

#### Our Commitments:

- Hosting The Festival at Masdar City as an ongoing, year-long event with different editions
- Doubling our social media followers in 2022-2023 to engage stakeholders and share regular updates of Masdar City's initiatives for community engagement
- Actively contributing to important events which provide knowledge transfer to other businesses and real estate developers
- Introducing health and well-being activities
- Providing networking events for small businesses and start-ups

Positive social impact is at the core of everything we aim to accomplish at Masdar City. We recognize the importance of strengthening and empowering our residents as it is an integral part of our sustainability ambition and purpose as an organization. As a model for future cities, we always welcome and encourage key stakeholders, including official and corporate delegations. Through this, we can share our visions and progress and serve as an inspiration to other cities in the world.

Our marketing and communications department oversees the implementation of our local community engagements and initiatives. Their responsibilities include:

- Developing and implementing a comprehensive stakeholder engagement strategy to build and maintain positive relationships with various stakeholders
- Identifying and mapping key stakeholders, including government entities, local communities, businesses, educational institutes, NGOs, and other relevant organizations

- Conducting regular outreach activities and meetings with stakeholders to keep them informed about Masdar City's projects, initiatives, and developments
- Planning and coordinating guided tours of Masdar City for various groups, including government officials, diplomats, industry professionals, students, and the general public, to showcase the city's sustainability features and initiatives
- Providing informative presentations and engaging materials to tour groups and delegations, highlighting the city's achievements, sustainable practices, and future development plans
- Organizing and coordinating events, workshops, and forums to facilitate meaningful interactions between Masdar City and its stakeholders
- Supporting the sustainability and corporate social responsibility (CSR) department by engaging, and communicating initiatives to stakeholders

### **Environmental and Social Impact Assessment (ESIA)**

We are committed to creating a positive social impact within the communities in that we operate in. We strive to empower and enable future generations, our current economy, and our local communities, by providing exciting new opportunities where people are able to expand their knowledge base and become a part of our sustainability movement, while enjoying all the benefits that Masdar City has to offer. We regularly provide job creation opportunities during the construction of innovative projects and buildings, while also providing access to untapped community resources.

All our development projects undergo environmental and social impact assessments (ESIA) to help us in determining the necessary local community development initiatives. These assessments aim to establish baseline data of the local community while capitalizing on current resources and identifying risks. Through this assessment,

together with our collaboration with local stakeholders and citizens, we determine what the community needs and how to address and mitigate any potential risks or conflicts. For our communities, local stakeholders considered include government entities, businesses, educational institutes, NGOs, and the public.

We ensure that our policies and investments address all the concerns of the communities and society, through a decision-making approach that involves transparent engagement, active consultation, and collaborative dialogue with our stakeholders, management, and shareholders.

To maintain efficient oversight on the progression of initiatives while also ensuring that the objectives and goals are achieved for the community projects we undertake, we continuously monitor the project's progression against original plans by implementing a regular check-up process. This is done via comprehensive performance evaluations, data collection of engagement numbers, and communications impact (such as social media or the news), and regular feedback mechanisms from stakeholders, allowing us to make informed adjustments and improvements for future projects.

It is paramount in our framework that we inform the public of the outcomes of our assessments and community projects, including our accomplishments, progress, and advancements. Along with regular community updates, we communicate such matters through town hall events, and other meetings and engagements. In 2022, we initiated several stakeholder meetings, as outlined below.



171

stakeholder meetings



147

meetings with business delegations, government, and the private sector



13

meetings with various education institutions

### **Our Social Programs for the Local Community**

We recognize the importance of giving back to our communities, as well as the value they provide for our organization. Our Corporate Social Responsibility (CSR) initiatives are aimed at enhancing the overall growth and prosperity of the local communities and the nation. With this, we aim to revitalize the local area and support its communities by making a significant social impact through our key focus areas of employment creation and health and well-being improvements.

As of 2022, we have launched or are in the process of relaunching the following programs designed for our local community.

- Innovate, an initiative by Masdar City, that offers startups a platform for networking, marketing, or raising capital. Allowing startups to seek investment and develop their businesses
- The Festival, an ongoing year-long event that had halted due to COVID, will now be relaunching. The Festival allows the local community to experience all of what Masdar City has to offer and gives them a chance to enjoy our low-carbon facilities
- Free guided tours to students and other establishments, to share knowledge and inspire attendees on sustainable living and practices

In 2023, we plan to conduct a mangrove planting initiative in Abu Dhabi. We envision that this initiative will support the livelihoods of the communities in these coastal areas, and simultaneously promote biodiversity and act as a carbon sink in the future to help capture GHG  $\rm CO_2$  from the atmosphere.

### **Delegations Welcomed in Masdar City**

We are committed to welcoming key stakeholders to Masdar City, including official and corporate delegations, to showcase Masdar City's ambition. We have welcomed important global leaders such as heads of state, ambassadors, diplomats, business delegations, and private sector academia, among others.





| _       |       |          |    |
|---------|-------|----------|----|
| Summary | of De | legation | S: |

| Managed 257 official delegations and protocol support. This represents an increase of | 257 |
|---|-----|
| 176.5 percent from 2021   |     |
| Heads of State  |     |

| Mining and Mining |   |  |  |
|-------------------|---|--|--|
| •                 | H.E. Dr. Samia Suluhu Hassan, President of Tanzania |  |  |
|                   | The further out was all the state to further than   |  |  |

| Ministerial Visits   | 54  |
|--|-----|
| Ambassadors / Diplomats  | 53  |
| Virtual and In-person Meetings held with Embassies for ADSW and ZSP outreach   | 248 |
| <b>Abu Dhabi Executive Office</b> – administrative protocol (MoM) – A total of 159 official post-event documents submitted | 159 |

<sup>22</sup> The table encapsulates figures with Masdar ADFEC for 2022

◆ H.F. Armen Sarkissian President of Armenia

### Future Program: Launching Innovate – by Masdar City

Innovate was launched as a Masdar City initiative in 2021 to provide participating small and mid-size enterprises (SMEs) with a platform to nurture their sustainable innovations, and opportunities to engage with potential investors. The initiative focuses on the areas of urban mobility, clean energy, agritech and food security, water, energy storage, and artificial intelligence.

We are planning on hosting an exhibition at the World Future Energy Summit, showcasing groundbreaking technologies from both regional and international startups and small and mid-size enterprises (SMEs). The Innovate program will be featured during Abu Dhabi Sustainability Week and included a series of industry panels featuring industry experts and innovators, who discussed critical climate topics as the global community prepares for COP28 in the UAE.

Participating companies in the 2022 edition of Innovate include (but are not limited to):

- Aerodyne Group
- Circa Biotech
- Datethanol
- Delve by Sidewalk Labs
- ◆ Exelex

2

- Graphene Engineering Innovation Centre (GEIC)
- Kiwibot

- ◆ Olokun Minerals
- QS Monitor
- Sunbox Innovation
- Tenderd
- ◆ Teratonix
- ◆ The Futurist Company
- Voltserver

### Delivering Exceptional

### **Customer Experience**

We aim to facilitate productive and positive experiences for all our buildings' customers, by uniting stakeholders to build and manage places with purpose. Maintaining open and collaborative communication with our building customers is key to understanding and meeting their needs.

A critical element of our strategy is to determine initiatives and actions to ensure our customers are satisfied with our products and services. We have identified the following strategies to do so:

- Growing the number of on-site team members dedicated to community management and tenant experience
- A dedicated account management portfolio to handle each customer case by case and ensure any inquiries are attended to

Masdar City has implemented a Facilities Management Helpdesk and Customer Service Centre for its customers and tenants. This also includes a hotline to deal with electricity- and water-related emergencies.

As part of our commitment to provide our customers in the free zone with the best packages available, we have introduced the New Space Economic Zone Program. We have also restructured the existing packages to enhance the selection process for the customers to help in deciding the right package for their business needs. We have taken this a step further by introducing the Women Entrepreneurship Program package to promote women in the world of sustainability.

### **Key Highlights**

### Masdar City, UAE Space Agency announce Exclusive Business Package for Start-Ups and SMEs

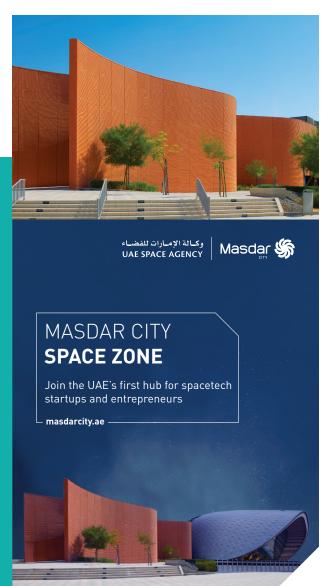
In September 2022, in collaboration with the UAE Space Agency, we launched the Masdar City Space Economic Zone Program. It is a business incubation and acceleration package for space sector start-ups and small and medium-sized enterprises (SMEs) to join the first space-tech hub in the UAE.

The program is dedicated to:

- Increasing the competitiveness of UAE's private sector
- Strengthening national capabilities
- Encouraging the development of the national space industry
- Contributing to the UAE's economic growth as a space-tech hub
- Assisting in the establishment and rapid growth of homegrown start-ups

The specialized zone provides an integrated business ecosystem with top-notch infrastructure, office space, and an enabling environment to support the SMEs and start-ups headquartered there.

With the Masdar City Free Zone and the UAE Space Agency now providing specialized business licenses for space-related companies in the launch sector, satellite communication, logistics, data analysis, science, technology, engineering, and more, new businesses joining the Space Economic Zone can now benefit from business registration and licensing services.



### Women Entrepreneurship Program to Empower Women into the Sustainability World

Launched in August 2021, Masdar City Free Zone introduced a new business package exclusively for all women entrepreneurs, to further support the growth of women-led companies in the UAE.

| Women Entrepreneurship Program | 2021 | 2022 | Total |
|--------------------------------|------|------|-------|
| Number of companies            | 3    | 12   | 15    |



### **Masdar City's Free Zone**

Masdar City is a free zone and investment zone that provides a unique location for multinationals, SMEs, and start-ups to prosper in a collaborative environment that connects business, research, innovation, and knowledge.

#### Our key features:

- Land: Developers can buy or lease land to develop projects designed to enhance mixed-use community living, incorporating apartments, office buildings, schools, retail outlets, light industrial facilities, research and development initiatives, and hotels.
- Built to suit: Larger corporations can partner with Masdar City to create bespoke commercial, retail, residential, recreational, educational, and corporate spaces. The Masdar City team works with companies to design and deliver a completed project tailored to the client's business requirements, technical specifications, and financial expectations.
- Office space: Masdar City has sustainable office space that caters to all sizes of businesses, from start-ups to SMEs and multinationals. Options include flexi desks in a shared workspace, serviced and executive offices, and larger core and shell units that provide the opportunity to create a unique office environment. All office buildings in Masdar City are conveniently located to ensure easy access for both staff and visitors.
- Retail space: Retailers can lease space to house food and beverage and service outlets throughout Masdar City.

### Masdar City's Free Zone Status allows for several advantages and benefits, including:



**O percent** import tariffs



R&D cosystem



**100 percent** foreign ownership



Freedom of repatriation

of both capital and profits



Critical mass of
sector knowledge
and talent innovation
ecosystem



100 percent
exemption from
corporate and personal
income taxes



Launching point
into local, regional,
and international
markets



Highly

cost-effective

licensing and

office space



Enhanced ESG performance

due to our sustainable office spaces, low-carbon transportation, etc.



Quick and easy set-up, with a

"One-Stop Shop"

for registration, government relations, and visa processing

# The free zone one-stop-shop offers quick and easy access to a range of vital business services, including:



Registration, licensing, and leasing



Visa services, including medical checks



Dependents' sponsorship



Abu Dhabi Chamber of Commerce membership



Emirates ID card processing



**Customs** administration



Document authentication



PO Box set-up



Facilities and property management



Meeting room and conference facilities

#### Growth of the Free Zone:

| Year                                   | 2019 | 2020 | 2021 | 2022 |
|--|------|------|------|------|
| Total Registered Companies at Year End | 715  | 905  | 1070 | 1116 |
| New Registration                       | 150  | 275  | 255  | 207  |

To understand our customers' needs and expectations, we ensure that we engage with them in an efficient manner. Examples of our current initiatives include:

- Customer relations
- Employing dedicated site-level community management and tenant engagement professionals
- Signing of agreements with corporate service providers (CSP)

| Reporting Requirements                            | Unit    | 2021 | 2022 |
|---|---------|------|------|
| Customer return rate                              | percent | 90   | 85   |
| Number of customer complaints raised              | Number  | 24   | 27   |
| Number of customer complaints resolved            | Number  | 17   | 15   |
| Number of customers engaged across all portfolios | Number  | 815  | 909  |
|   |         |      |      |

# Sourcing

# **Sustainable Practices**

#### Our Commitments:

- Promote the use of sustainable products and services
- By 2023, develop our Sustainable Procurement Guidelines to enforce sustainable sourcing requirements

Masdar City aims to promote a way of life centered around incorporating sustainability within all aspects. We therefore encourage our partners and suppliers to adopt the best sustainable practices as well as work with vendors and suppliers to operate and improve buildings.

We recognize that social factors are important to consider during the selection process of vendors for the management of our real estate investments. Our procurement process prioritizes working with vendors that reflect our values and are offering the opportunity to support diverse businesses and create more inclusive communities where we invest.

During 2022, 100 percent of our products and services were procured from local suppliers. Our main business partners comprise of suppliers and contractors who collaborate with our business directly and indirectly to deliver a product or service. Examples include vendors, manufacturers, contractors, sub-contractors, and other service providers across several services including civil, infrastructure, mechanical, electrical, plumbing, extra low voltage systems, building envelope, façade, fit-out, landscaping, swimming pools, kitchen and laundry, and vertical transportation systems.

### **Our Sustainable Procurement Guidelines**

We plan to develop our Sustainable Procurement Guidelines ("the SPG") by 2023, which will specify the ethical and legal standards that suppliers must adhere to. We are currently in the process of identifying the detailed ESG criteria covering the following topics:



Human Rights and Labor



Information Security



Business Continuity



Fair Business and Ethics



**Quality and Safety** 



Health and Safety



Environment



Planning



Establishing a Management System

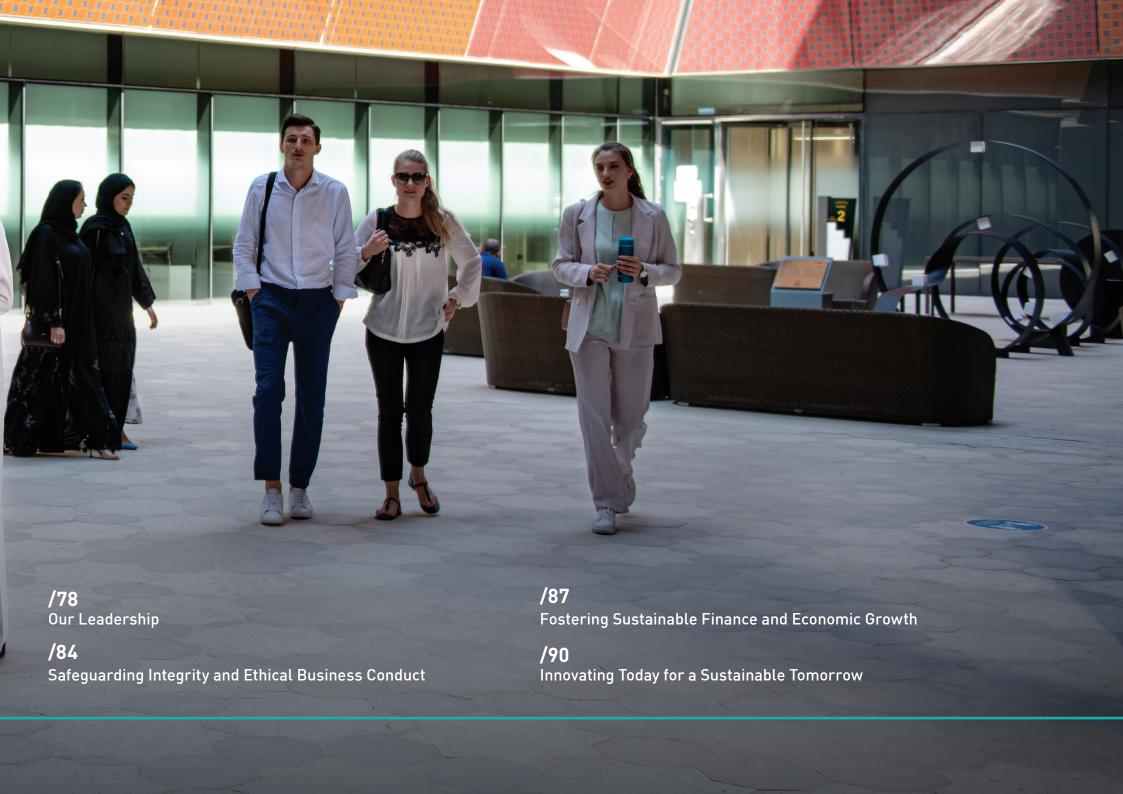
### Highlights: Embedding ESG in Our Supply Chain

We are committed to working with our business partners to help us achieve our ESG commitments and objectives. We have established all the required sustainability criteria, including quality, health and safety, and environmental requirements, and have integrated them into our procurement decisions. To avoid delays, we created framework agreements (FWAs) to ensure business continuity and avoid disruption in case of missing requirements.

Our suppliers are required to be 100 percent compliant with the aforementioned criteria before they deliver their products and services to Masdar City.

We regularly review our current policies, procedures, and training initiatives across the business to ensure that they fully reflect our commitment to human rights and ethical practices, including child labor and forced/compulsory labor. Within these policies, requirements are outlined regarding the measures that were taken to mitigate risks, such as due diligence procedures, supplier education and policies, standard contract language, and avoidance of high-risk regions.



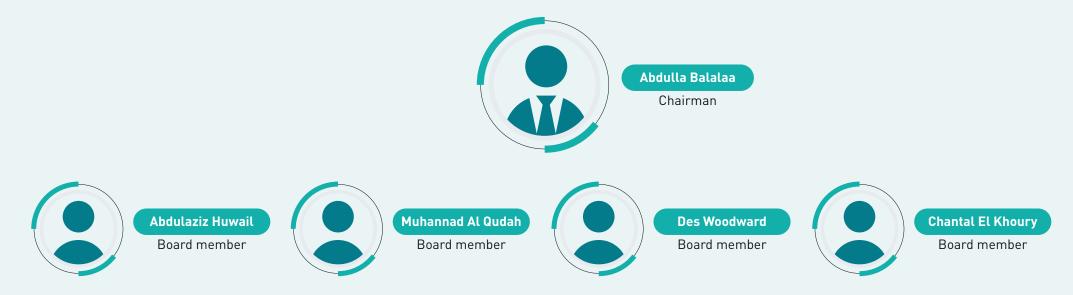


# Our **Leadership**

Our board of directors and executive team have decades of experience in the region and overseas. The board oversees operations, monitors corporate performance, and ensures that our legal, ethics, and compliance programs are effective and consistent. Masdar City is under the ownership of Mubadala Investment Company, which manages the long-term investments that deliver strong financial returns and

genuine social benefits for Abu Dhabi. Mubadala Investment Company is mandated to nominate individuals for Masdar City's board among its own employees, and other suitably qualified persons. Sectoral experience is considered when selecting the highest governance body.

#### **Board of Directors**



### **Executive Management**







### **Board Structure and Composition**

Our board of directors has five members, three of which are executive members. None are independent. The board meets on a quarterly basis. We also have four committees that also meet regularly: The Tender Committee, the Social Activities and Inclusion Committee, the Audit, Risk, and Compliance Committee, and the Compensation and Benefits Committee.

### **Board Skills**

Collectively, our board, brings a balance of relevant skills, professional experience, and diversity of backgrounds to effectively oversee Masdar City's business risks and strategies. All of our five board members have significant expertise such as real estate development, urban design, finance and construction.



### **Board Responsibilities**

The Masdar City board is jointly accountable for all board decisions.

Each director's responsibilities include, but is not limited to, the following:

- Providing leadership and ensuring compliance with applicable law and the company's corporate governance standards
- Allocating sufficient time to their duties, including time to attend meetings of the Board, time to prepare for meetings and time to stay adequately informed of the updates relating to the Company
- Acting with integrity and exercising duty of care and confidentiality
- Acting in good faith and with due care and diligence, in the best interest of the Company and avoiding conflicts in the role of being a director from any personal interests
- Objectively analyzing matters and encouraging constructive debate on the board and ensuring all relevant issues are given due consideration before a decision is made
- Overseeing the implementation of necessary procedures to ensure that the Company is operating efficiently, effectively, and legally toward achieving its goals
- Understanding the roles and responsibilities of the board and ensure that the board performs the roles, responsibilities, and duties to the best of its ability
- Complying with the Mubadala Group Code of Ethics

To strengthen our board's capacity to manage our ESG impacts and oversight of our policies, they receive training and regarding the operations of the company, our policies (including the Code of Conduct), priorities, and ESG initiatives and risks.

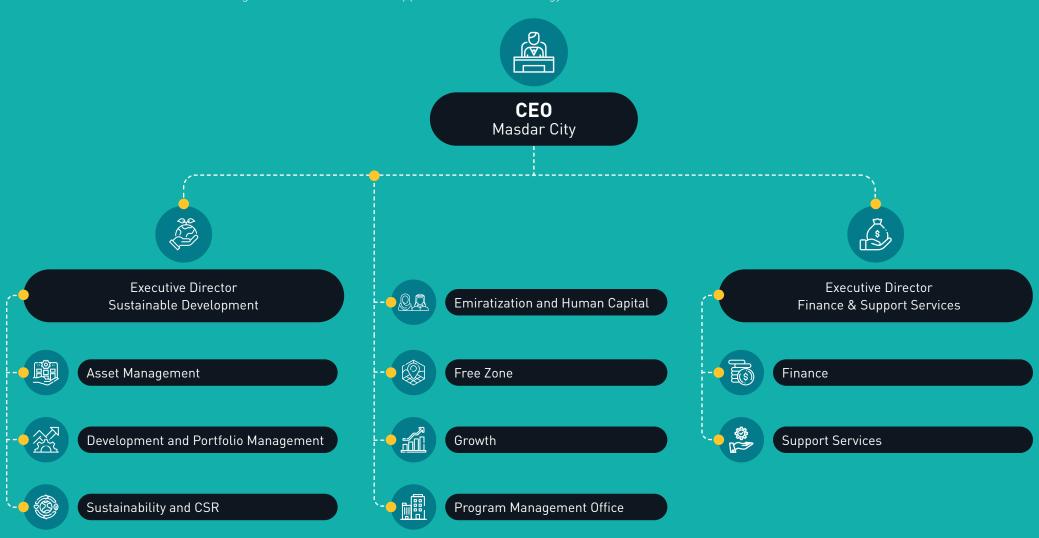
### **Board Evaluation**

Evaluation of the performance of the highest governance body is a self-appraisal process that the Mubadala Investment Company shareholder uses to assess the performance of the board of directors and its board committees and committee members.



### **Our Organizational Structure**

In December 2022, we announced our organizational structure to support the business strategy of our shareholders. The structure came into effect in December 2022.



### **Committees**

### 1

### Tender Committee (TC)

The Masdar City Tender Committee has been established as an advisory committee to assist Masdar City management in maintaining, monitoring, and controlling Masdar City's procurement process.

The main objectives of the TC are as follows:

- To maintain integrity, establish and exercise control over the procurement process and ensure that contractual risks are managed
- ◆ To ensure that the policies and procedures, and committees when it stands alone are followed and that best practices are observed, as follows:
  - as far as practicably possible, only appropriate pre-qualified vendors are to be invited to submit competitive quotations / tenders
  - all quotations / tenders are to be received and dealt with objectively and impartially
  - all quotations / tenders are to be subject to comprehensive and fair technical and commercial evaluation
  - all purchase orders / contracts are to be placed in accordance with the PPM and on the basis of best available terms after considering technical requirements, price, schedule, and other factors
  - competitive bidding is to be used in all cases where it is feasible
  - the most possible competitive pricing is to be achieved with no sacrifice of technical requirements
  - best value for money spent is to be achieved; and
  - changes to awarded commitments are to be monitored and controlled
- To encourage the development and use of innovative best practices pertaining to contracting and procurement

- To assist and advise Masdar City's management on decisions and recommendations with respect to issues defined in this document
- To review and support or reject TC submissions, submitted by the Head of the Procurement and Contracts Department on behalf of the relevant division

#### 2

### Audit, Risk and Compliance Committee

The purpose of the committee is to provide a structured, systematic oversight of the company's governance, risk management and internal control practices. The committee, board of directors and management in fulfilling their oversight, governance and risk management responsibilities relating to:

- ◆ The company's accounting policies, financial statements, and financial reporting process;
- The annual external audit and the external auditors, including their qualification and independence;
- The governance structure, internal control framework, including but not limited to all operational and financial reporting controls;
- The risk management framework, process and controls;
- The oversight of the internal audit activity;
- Treasury and finance matters;
- Ethical conduct and culture of the company;
- Compliance with the Mubadala's Code of Ethics and group ethics & compliance;
- The government audit; and
- Compliance with applicable laws and regulations, Mubadala's Code of Ethics, contractual arrangements and agreements, and the company's policies and procedures as established by management and the board of directors

3

### Compensation and Benefits Committee

The Masdar City Compensation and Benefits Committee has been established to endorse policies and make decisions in areas such as promotions, compensation and benefits, and other associated matters prior to the submission to shareholder.

4

#### Social Activities and Inclusion Committee

The purpose of the Committee is (a) the running of social activities, sporting activities, events and benefits for the social enjoyment, entertainment, amusement, and association of company employees and families; and (b) to promote and implement the company's inclusion program.

The aim is to facilitate and increase inclusive and respectful employee interaction and engagement in both the workplace and a social environment, in order to increase communication and harmony among employees, promote cultural exchange and promote participation in various activities.

Masdar City's inclusion program (the "Inclusion Program") is a platform dedicated to the theme of: "Ethics, Diversity & Inclusion- Creating a Sustainable Culture of Respect to Achieve Higher Performance."

The mandate of the Committee as part of this Inclusion Program is to:

- Promote awareness of ethical and inclusive behavior within the Company
- Establish a platform for better transparency within the Company
- Celebrate the vast number of different cultures and perspectives of the Company's Employees

#### **Our ESG Governance**

ESG responsibility and oversight has already been established within our governance framework. To ensure alignment with our corporate strategy, our overall ESG performance oversight is assigned at board level. The board is involved in making recommendations as well as guiding our ESG targets, objectives, and progress. The executive director of sustainable development is responsible for reviewing and approving our annual ESG report. Our associate director of sustainability and corporate social responsibility (CSR) leads Masdar City's ESG team and sets the direction of the ESG strategy and its associated goals, initiatives, and key decisions across our focus areas.

We continuously measure and monitor our ESG performance to ensure that we are on track with the commitments we have set out to achieve, our overall ambition and that we meet our material KPIs. The KPIs set are based on standard reporting frameworks including GRI and Global Real Estate Sustainability Benchmark (GRESB) and are assigned to the relevant business units for measurement and monitoring. The results and progress of our ESG performance are reported to executive management and board, serving as a valuable input in developing future targets and initiatives to further improve our ESG performance.



# Safeguarding Integrity and **Ethical Business Conduct**

Our robust governance framework ensures that we follow the highest professional integrity and ethical business conduct in our business operations. We ensure that our values are reinforced in our people through training and communication. We are committed to meeting all applicable legal and regulatory compliance requirements of where we operate. We have established policies to demonstrate and ensure commitment to our business ethics. These include:



Code of Fthics



Conflicts of Interest



Anti-Bribery and Corruption



Business Partners
Due Diligence



Personal Trading



International Trade Control

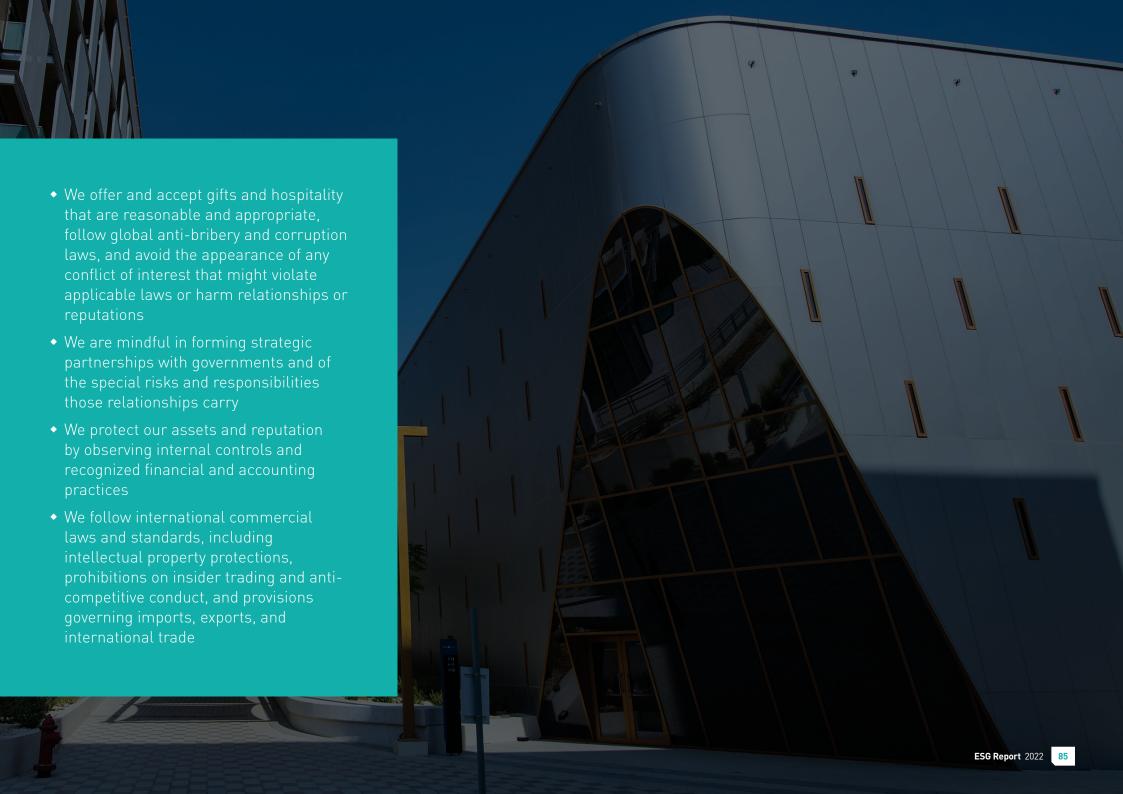


Data Privacy



Business Partner Code of Conduct

# Code of Ethics At A Glance: • We are committed to a culture of ethics our global business with integrity and in accordance with applicable laws, rules, • We encourage you to speak up when you see or suspect violations of the law, rules, regulations, policies, or this Code of Ethics • We treat everyone with respect and do not tolerate unfair treatment, harassment, discrimination, abuse, or retaliation within the workplace • We protect sensitive, confidential, and material confidential information and personal data • We carefully select our customers. partners and suppliers and require that they conduct their business activities professionally, ethically, and in compliance with applicable laws, rules and regulations



### **Our Code of Conduct and Code of Ethics**

The Code of Conduct and Code of Ethics cover all necessary policies and procedures, highlighting our commitment to compliance and ethical conduct in all aspects of our operations. It sets out our minimum standards of conduct that are expected from all our stakeholders. With our robust governance structure, the board has oversight on our operations, monitors overall corporate performance, and ensures that the effectiveness and consistency of our legal, ethics and compliance programs are consistently upheld. It also provides rules and standards that establish guidelines for our employees on appropriate behavior in the conduct of their businesses and in accordance with our core values as an organization.

Given we are part of the Mubadala Investment Company, our critical concerns are communicated to the highest governing body in line with Mubadala Investment Company's policies.

Our Code of Conduct and Code of Ethics are integrated with Mubadala Investment Company's Code of Conduct and Code of Ethics. Mubadala Investment Company has become one of only four global companies to receive the International Organization for Standardization in effective Compliance Management. This is testament to our robust governance structures and frameworks.

We require all our employees to complete a code of conduct and code of ethics training on an annual basis, which covers anti-corruption, anti-bribery, conflicts of interest, and non-retaliation. We reinforce the Code to our employees through several communication channels such as training and newsletters. They may also access it on Mubadala's Investment Company's website.

To further showcase the high standards that are set by Mubadala Investment Company, Mubadala has been re-certified with ISO 37001:2016 in effective Anti-Bribery Management. Mubadala's proactive Ethics and Compliance program is a central component of how it does business, setting the foundation and expectations for individual and team behavior across the organization. During 2022, we had zero instances of fines or non-compliances with laws and regulations.

### **Our Grievance Mechanisms**

We encourage our stakeholders to report any matters related to a breach of the company's ethics and integrity principles. If they have any inquiries, need to seek advice, or report ethics concerns or unethical behavior, we ensure easy access through several reporting channels. These channels include email, telephone, and a digital platform, all of which are available 24/7. Employees are also given the option to report any concerns anonymously.

Our Whistleblowing Policy is in place to ensure that we protect our people and empower them to raise concerns from retaliation, discrimination, or harassment. Any suspected violations of ethics and integrity are taken very seriously, and we ensure that we respond to these concerns in an urgent manner. If proven to be true, disciplinary actions and remedial actions are developed to ensure that there will be no increasing trends of similar cases in the future, and that any wrongdoings are appropriately addressed.

Our Ethics and Compliance team leads the conduct of investigations of reported concerns and dictate the action(s) required.



# Fostering

# Sustainable Finance and Economic Growth

We are positioned to actively contribute to the economic growth of the nation and the advancement of UAE's real estate market through our operations. Aside from generating economic value, we also contribute to job creation, boosting tourism, and enhancing local community activities. We continuously aim to support the development of Masdar City's real estate portfolio by seeking capital and providing investors with an opportunity to invest in sustainable buildings.

### Masdar Green Real Estate Investment Trust (REIT)



#### What is a REIT?

A Real Estate Investment Trust (REIT) is a fund that owns and operates incoming-producing properties and distributes to the unitholders at least 80 percent of its audited annual net income. Investors can buy shares in a REIT and in return, they receive a share of the rental income that the REIT earns from the properties that it owns. In addition, investors have the opportunity to benefit from capital appreciation on the properties in the fund:



In January 2020, we announced the launch of the Masdar Green REIT (MGR) during Abu Dhabi Sustainability Week (ADSW). The Masdar Green REIT was established in Abu Dhabi Global Market (ADGM) as a Qualified Investor Fund (QIF) and is managed by Masdar Capital Management Limited, which is regulated by the Financial Services Regulatory Authority. Masdar Green REIT aims to offer an attractive opportunity for investors through private placement to invest in a unique portfolio of stable, income-producing, sustainable real estate assets. It has a mandate to invest in sustainable real estate assets.





The strategic objectives of the REIT are:

- To create, and offer to market, the best sustainable REIT in the region
- Create value for all MGR shareholders
- ◆ Focus on transparency, corporate governance, performance to all current and future MGR shareholders
- To safeguard the quality, sustainability, and brand of Masdar City
- To support the development of Masdar City through capital recycling

The Masdar Green REIT will also provide an investment vehicle through which third-party sustainable developers can monetize their assets, attracting both real estate developers and investors to Masdar City. By contributing additional funding to support the future expansion of Masdar City, including new buildings, the REIT will help bring more sustainable real estate assets into the market.

We have partnered with the following financial organizations to support the implementation of this program:

- Abu Dhabi Global Market (ADGM) / Financial Services Regulatory Authority (FSRA)
- Emirates NBD Asset Management
- First Abu Dhabi Bank (FAB)

### **Key Highlights**

### Masdar Green REIT signs green financing commitment with First Abu Dhabi Bank

In 2022, MGR signed a \$200 million USD financing commitment ("Green Loan Facility") with First Abu Dhabi Bank (FAB), inclusive of LMA Green Loan Principles. FAB acted as the sole mandated lead arranger, book runner, green loan coordinator, agent, security agent, and bank account for this transaction. This Green Loan Facility will allow MGR to expand its portfolio of sustainable real estate by purchasing new buildings in Masdar City. The proceeds from this Green Loan Facility will assist Masdar City in its growth targets and bring more sustainable real estate assets to market through new sustainable projects.

## Masdar Green REIT bolsters portfolio with AED934 million sustainable real estate acquisition

In 2022, Masdar Green REIT successfully completed the acquisition of two new properties valued at AED934 million, raising the total value of its portfolio to AED1.91 billion. The acquisitions included the headquarters of the Abu Dhabi Quality and Conformity Council, and Etihad Airways' Eco Residences complex, both of which are fully occupied, LEED Platinum-rated buildings located in Masdar City. The third property previously acquired was the main office of the Technology Innovation Institute which is LEED Gold certified. All three assets are also rated a minimum of 3 Pearls under the Estidama Pearl Rating System.



# Innovating Today for a

# **Sustainable Tomorrow**

Masdar City is devoted to innovation and digital transformation, we aim to strengthen our position as center for the development of clean tech, AI, and autonomous transport startups. To remain ahead of digitalization in the sector, we have launched several projects to update our IT architecture with the latest systems. Masdar City's R&D work serves all the organization's business units. It offers technological solutions designed to improve their performance and prepare for the organization's future.

### **Key Highlights**

#### **ICT net-zero Campus**

Net-zero campuses reduce the cost of energy consumed and improve efficiency of space utilization by cutting down on the footprint required to deliver the ICT services.

- ICT Smart Campus To minimize the ratio of the total amount of energy used by a computer data center facility to the energy delivered to computing equipment, advanced materials, enhanced AI powered tools and intelligent lossless datacenter networks.
- ICT Energy Use Implementing strategies to reduce power and cooling load of ICT equipment and moving towards increased use of PoE devices will contribute to the overall reduction of energy consumption and will allow better awareness and management of this segment of energy demand.

### **Masdar City Command and Control Center**

Masdar City is in the process of rolling out real-time energy, water, and waste monitoring in all its buildings. Data will be fed into a new Command and Control Center, which will give us a single viewpoint into all our building and transportation operations, offer deeper insight into building performance, and help us maximize and demonstrate our sustainability and efficiency.

### Smart City solutions from autonomous vehicles, smart offices, and visitor experience center

Masdar City has pioneered two generations of electric autonomous vehicles for use on the podium, which is car-free. The Personal Rapid Transit (PRT) system, and the NAVYA system, which operates on top of the podium interacting with pedestrians, bicycles, and golf carts as it transports passengers to various points in the city's center. Collectively, the systems have transported more than 2.5 million people. Work is underway on our third-generation autonomous electric transportation system.

# Masdar City to host 1,700 sq. m. site for agritech startups with greenhouses and farming areas

Masdar City supports its hosting of a "beta-site" to analyze the potential of early-stage agri-tech enterprises founded and piloted in the emirate. The concept brings together Masdar City and Dana, an investor in start-ups, particularly those with female founders.

One of the beta site will focus on local and regional startups. The site began construction in July 2022 with full-time operations beginning by the end of the 2022. This collaboration will provides an opportunity for emerging start-ups to demonstrate the potential of their domestic agri-food solutions prior to market entry. Companies

from UAE and the region will have access to reliable infrastructure as well as advice to overcome resource scarcity and food security challenges in desert locations. The partnership is in talks regarding offering services to portfolio companies alongside venture investors and incubators.

#### Innovation at Masdar City: The Catalyst

The Catalyst is Masdar City's venture arm, investing in start-ups focusing on clean tech and offering business support including office and manufacturing space, mentoring, marketing, and more. The Catalyst's portfolio companies are creating real-world solutions to climate change. Examples include Circa Biotech, which is turning organic waste into animal feed, and Seramics Materials, which is turning industrial waste into high-quality ceramic tiles.

#### Seawater Energy and Agriculture System (SEAS) / Food and Biofuel

The Seawater Energy and Agriculture System (SEAS), managed by Khalifa University and hosted at Masdar City, is a research facility designed to use organic materials, including algae, that do not require fresh water to create sustainable aviation fuel. Fuel produced through the project has been used on Etihad flights. Honeywell, Boeing, General Electric, and Etihad have all collaborated on the project.

#### **Masdar City Eco-Villa Prototype**

In 2017, Masdar City completed the Eco-Villa, the first net-zero energy building in the UAE, as a demonstration project. The 400-square meter Eco-Villa is the first to achieve a 4-Pearl rating under the Estidama Pearl Rating System. It was designed to use 72 percent less energy and 35 percent less water than a conventional villa of a comparable size in Abu Dhabi. Rooftop solar panels produce as much energy as the villa uses over a year.

### Personal Rapid Transit (PRT) System

Carrying its first passenger in 2010, the PRT system was Masdar City's first in a series of transportation pilots. The driverless vehicles are controlled by an advanced navigation system. They use magnets embedded in the corridor to know their position and employ onboard sensors to detect any obstacles in their path. A wireless

connection keeps them linked to the central computer, which guides them on their journey and ensures smooth operation among all vehicles.

#### Beam-down and Sterling Energy Storage with KU

This one-of-a-kind 100 kW beam-down solar concentrator facility, managed by Khalifa University and hosted by Masdar City, provides local and international research institutes and solar and energy storage companies the opportunity to research, test, and validate new solar energy components and systems. While most concentrated solar power systems focus sunlight on a substance that is elevated into the air, this innovative system beams sunlight onto the ground, creating the potential for more efficient and cost-effective energy generation — particularly in hot, sunny climates such as the UAE's.

#### **Graphene with Zero Carbon**

A Masdar City-based start-up, Zero Carbon, has developed a unique system to tackle the issue of methane emitted from landfills. They are capturing landfill gas before it is emitted into the atmosphere and repurposing it in graphene and hydrogen manufacturing facilities. Both materials are used to enhance the performance and sustainability of many common materials, including textiles, paint, and concrete, which in turn helps the construction industry build more sustainably.

### **Forty Guard**

Forty Guard, part of Masdar City's Innovate program, is building a cloud-based Artificial Intelligence tool to provide cities with access to enriched temperature insights by leveraging untapped existing data sources. They can accurately predict temperatures by understanding heat patterns and helping decision-makers identify mitigation strategies and create construction materials that help reduce outdoor surface heat — which is a vital component of Masdar City's master plan.





# Appendix 1:

# **GRI Content Index**

Masdar City has reported the information cited in this GRI content index for the period of January 1 to December 31, 2022, with reference to the GRI Standards.

**GRI 1 used** GRI 1: Foundation 2021

| GRI Standard        | Disclosure  | Page Number(s) and/or Direct Answer | Omission |  |  |
|---------------------|---|-------------------------------------|----------|--|--|
| General Disclosures |   |                                     |          |  |  |
|                     | 2-1 Organizational details  | 6, 12                               |          |  |  |
|                     | 2-2 Entities included in the organization's sustainability reporting            | 7                                   |          |  |  |
|                     | 2-3 Reporting period, frequency and contact point                               | 7                                   |          |  |  |
|                     | 2-4 Restatements of information   | No restatements made in this report |          |  |  |
|                     | 2-5 External assurance  | No external assurance conducted     |          |  |  |
|                     | 2-6 Activities, value chain and other business relationships                    | 13                                  |          |  |  |
|                     | 2-7 Employees   | 58                                  |          |  |  |
| GRI 2: General      | 2-8 Workers who are not employees   | 59                                  |          |  |  |
| Disclosures 2021    | 2-9 Governance structure and composition  | 78                                  |          |  |  |
|                     | 2-10 Nomination and selection of the highest governance body                    | 59                                  |          |  |  |
|                     | 2-11 Chair of the highest governance body                                       | 78                                  |          |  |  |
|                     | 2-12 Role of the highest governance body in overseeing the management of impart | ets 83                              |          |  |  |
|                     | 2-13 Delegation of responsibility for managing impacts                          | 83                                  |          |  |  |
|                     | 2-14 Role of the highest governance body in sustainability reporting            | 83                                  |          |  |  |
|                     | 2-15 Conflicts of interest  | 86                                  |          |  |  |
|                     | 2-16 Communication of critical concerns   | 48                                  |          |  |  |

| GRI Standard                          | Disclosu | re   | Page Number(s) and/or Direct Answer   | Omission |
|---------------------------------------|----------|--|---|----------|
|                                       | 2-17     | Collective knowledge of the highest governance body          | 80  |          |
|                                       | 2-18     | Evaluation of the performance of the highest governance body | 5, and Mubadala Investment company discloses this data in a separate report |          |
|                                       | 2-19     | Remuneration policies  | Remuneration policies do not cover the board                                |          |
|                                       | 2-20     | Process to determine remuneration                            | Remuneration policies do not cover the board                                |          |
|                                       | 2-21     | Annual total compensation ratio                              | Confidentiality constraints: We do not publicly disclose this data          |          |
| CDI 2 Conord                          | 2-22     | Statement on sustainable development strategy                | 20, 22  |          |
| GRI 2: General<br>Disclosures 2021    | 2-23     | Policy commitments   | 84  |          |
|                                       | 2-24     | Embedding policy commitments                                 | 86  |          |
|                                       | 2-25     | Processes to remediate negative impacts                      | 86  |          |
|                                       | 2-26     | Mechanisms for seeking advice and raising concerns           | 86  |          |
|                                       | 2-27     | Compliance with laws and regulations                         | 86  |          |
|                                       | 2-28     | Membership associations                                      | We were not a part of any membership during the reporting year              |          |
|                                       | 2-29     | Approach to stakeholder engagement                           | 34  |          |
|                                       | 2-30     | Collective bargaining agreements                             | Zero employees are covered under collective bargaining agreements           |          |
| Material Topics                       |          |  |   |          |
| GRI 3: Material Topics<br>2021        | 3-1      | Process to determine material topics                         | 30  |          |
|                                       | 3-2      | List of material topics                                      | 31  |          |
| Economic Performance                  |          |  |   |          |
| GRI 201: Economic<br>Performance 2016 | 3-3      | Management of material topic                                 |   |          |

| GRI Standard                         | Disclosur    | e<br>e  | Page Number(s) and/or Direct Answer  | Omission |
|--------------------------------------|--------------|---|--|----------|
| GRI 201: Economic Performance 2016   | 201-2        | Financial implications and other risk opportunities due to climate change | We will be disclosing this upon the development of our net zero strategy in 2023 |          |
| Performance 2016                     | 201-4        | Financial assistance received from government                             | We do not receive financial assistance from the government                       |          |
| Investments in Sustain               | able Infrast | ructure (non-GRI material topic)  |  |          |
|                                      | 3-3          | Management of material topic  | 90, 91   |          |
|                                      | Non-GRI      | Highlights of REIT  | 87, 88, 89   |          |
| Energy Management                    | <u>'</u>     |   |  |          |
|                                      | 3-3          | Management of material topic  | 47, 48, 49   |          |
| GRI 201: Economic Performance 2016   | 302-1        | Energy consumption within the organization                                | 48, 49   |          |
| r er for munice 2010                 | 302-3        | Energy intensity  | 48   |          |
| Water Management                     |              |   |  |          |
| GRI 303: Water and<br>Effluents 2018 | 3-3          | Management of material topic  | 50, 51   |          |
| GRI 303: Water and                   | 303-1        | Interactions with water as a shared resource                              | 50   |          |
| Effluents 2018                       | 303-5        | Water consumption   | 51   |          |
| GHG Emissions (includi               | ing embodie  | ed carbon)  |  |          |
|                                      | 3-3          | Management of material topic  | 41   |          |
| GRI 305-1: Emissions<br>2016         | 305-1        | Direct (Scope 1) GHG emissions  | 41   |          |
|                                      | 305-2        | Energy indirect (Scope 2) GHG Emissions                                   | 41   |          |
| GRI 305-1: Emissions                 | 305-3        | Other indirect (Scope 3) GHG emissions                                    | 40   |          |
| 2016                                 | 305-4        | GHG emissions intensity   | 40   |          |
|                                      |              |   |  |          |

| GRI Standard                | Disclosu   | re   | Page Number(s) and/or<br>Direct Answer | Omission |
|-----------------------------|------------|--|--|----------|
| Waste and Hazardous M       | aterials M | anagement  |  | '        |
|                             | 3-3        | Management of material topic   | 52, 53, 54                             |          |
| GRI 306: Waste 2020         | 306-1      | Waste generation and significant waste-related impacts   | 52                                     |          |
|                             | 306-2      | Management of significant waste-related impacts  | 52                                     |          |
|                             | 306-3      | Waste generated  | 54                                     |          |
| GRI 306: Waste 2020         | 306-4      | Waste diverted from disposal   | 54                                     |          |
|                             | 306-5      | Waste directed to disposal   | 54                                     |          |
| Employment                  |            |  |  |          |
|                             | 3-3        | Management of material topic   | 59, 60, 61                             |          |
|                             | 401-1      | New employee hires and employee turnover   | 59                                     |          |
| GRI 401: Employment<br>2016 | 401-2      | Benefits provided to full-time employees that are not provided to temporary or part-time employees | 60                                     |          |
|                             | 401-3      | Parental leave   | 61                                     |          |
| Occupational Health and     | l Safety   |  |  |          |
|                             | 3-3        | Management of material topic   | 62, 63, 64, 65                         |          |
|                             | 403-1      | Occupational health and safety management system   | 62                                     |          |
|                             | 403-2      | Hazard identification, risk assessment, and incident investigation                                 | 63                                     |          |
| GRI 403: Occupational       | 403-3      | Occupational health services   | 65                                     |          |
| Health and Safety 2018      | 403-4      | Worker participation, consultation, and communication on occupational health and safety            | 63, 64                                 |          |
|                             | 403-5      | Worker training on occupational health and safety  | 63, 64                                 |          |
|                             | 403-6      | Promotion of worker health   | 65                                     |          |
|                             | 1          |  |  |          |

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