SUSTAINABLE CITY

Track and improve local impact

Material Topic	Key Performance Indicators	Actions Taken
Infrastructure	Continuation of #1 free zone in the world	Winner of the FDi Free Zone of the Year 2020.
Health & Safety	Education of stakeholders	Stakeholders educated on COVID-19 safety protocols and regulations.
	Health and Safety Excellence (Uptown Dubai)	Uptown Dubai reached over 7 million safe man-hours without an LTI.[1]
	HSE Compliance (Community Developments non-DMCC)	Compliance with HSE protocols, along with COVID-19 guidelines, was robust.
	Management of HSE Suppliers	All suppliers have received questionnaires related to their responsible business practices.
	Smart City HSE	2 international safety awards
	Reduction of Community Fire Risk	Audits were carried out and an action plan was set for rectification of the issues raised.
Green Building	Reduction of Community Fire Risk	Reduced by 17% in One JLT with a target of 30% to be achieved by the end of 2021.
	Improvement of building operations through initiatives	Master Community LED lights installation, water efficiency, energy microgrid in Uptown Dubai, OneJLT's retrofitting project.
Water Use	Improvement of infrastructure	A tendering exercise was undertaken to carry out refurbishment works to the lakes that will reduce the amount of debris and pollutants from the deteriorating lake structures falling into the lakes.

[1] Lost Time Injury

	Improvement of data tracking and monitoring	Previously installed lake sensors are now linked into DMCC's Smart District Platform (see screen shot below). As a result, live data is now being collected about certain lake water quality and pollution parameters.
	Integration of green practices amongst our departments and community stakeholders	Lake dye has been introduced to reduce the amount of light within the lakes in order to decrease the amount of algae within the lake water. This also improves the water quality and air quality within the vicinity of the lakes.
Waste Management	Facilitation of recycling	More than 20% increase in the amount of waste recycled.
	Improvement of water quality for Master Community lakes	A tendering exercise was undertaken to install lake borewells that will pump clean ground water into the lakes. These will be installed during 2021 and will provide a sustainable source of good quality clean water to the lakes.
	Integration of green practices amongst our departments and community stakeholders	Social media campaigns were run to encourage residents, owners and occupiers within the Community to do more recycling.
	Reduction of plastic and paper consumption	There was an increase in waste collection within which plastic and paper is extracted for recycling, resulting in a reduced environmental footprint.

Energy	Improvement of data tracking and monitoring	Launch of 'Measurabl'[2], an international digital platform integrated with DEWA that tracks energy and water consumption across the Master Community and DMCC assets.
	Integration of green practices amongst our departments and community stakeholders	Frequent social media campaigns targeting tenants.
	Communicate DMCC's approach to sustainability environment to all stakeholders	Published our Sustainability Policy Statement, available on the website and provided to RERA.
Community	Implementation of Smart and Sustainable District Energy	Smart and sustainable projects rolled out in 2020.

We are in the business of creating spaces that fulfil our Community's needs to live, work and thrive. These spaces benefit our owners, residents as well as visitors, and through them, we build lasting relationships with these stakeholders, helping them meet their objectives and more.

Our health, safety, and environmental efforts are critical in creating a vibrant and sustainable community. DMCC is committed to provide a clean and healthy environment that fosters wellbeing.

Our Master Community is a mixed-use master community located in the heart of the Emirate of Dubai, UAE, which incorporates residential, commercial, retail and leisure uses. It includes all of Jumeirah Lakes Towers District, Uptown Dubai District, the Jewelry and Gemplex District, One JLT. Since its development, we have taken many steps to optimally manage water, waste, energy and other environmental-related issues.

This section demonstrates efforts made to positively impact our stakeholders' lives within our Master Community and align with the UAE and Dubai's priorities towards green growth and sustainable infrastructure. This year we developed sustainability guidelines for the effective management of energy, water, and waste and released a sustainability policy statement supported by the sustainability management programme. All waste in the Master Community is collected

[2] www.measurabl.com

by Bee'ah, a leading waste management entity in the UAE. They provide consolidated data reports so that DMCC can monitor progress on waste in the area. One JLT receives waste management information from their development partner Mace. Next year, we will explore the consolidation of waste management reports in collaboration with partners to ensure there is consistency in metrics being tracked and improved clarity on waste being generated versus waste being disposed and recycled.

Understanding the entire energy footprint of our Community is vital for us as it enables DMCC to put in place the right management strategies to ensure sustainable operations of the Community's energy demand. Throughout 2020, we continued to digitally monitor our electricity consumption across the Master Community and our owned assets to track our environmental footprint.

We also invested in LED lights for the cluster street lights, enterprise zones and various external landscaping areas in the Master Community. These will significantly reduce energy consumption and maintenance costs starting in 2021.

The UAE has one of the highest per capita water consumption rates in the world with demand growing. DMCC takes this issue area seriously. The water consumption in our Master Community includes retail and development use, which is why we take a multi-stakeholder approach and engage our partners and tenants to reduce water consumption and wastage. To tackle the high-water footprint due to our landscaping irrigation network, we partnered with a new service provider to reduce the number of leakages and excess watering – this will result in significant water savings from 2021 onwards.

CRITICAL HEALTH AND ENVIRONMENT-RELATED ACHIEVEMENTS IN OUR MASTER COMMUNITY:



- **Our advanced energy microgrid in Uptown Tower won the Construction Week Sustainability Initiative of the Year.**
- **We launched the 'Measurabl' platform which tracks DEWA bills across the Community.**
- **80% of our smart district systems integrate with the Smart District Platform.**
- **Our air-quality systems allow us to monitor air quality every five minutes.**

In the coming year, we will be approaching all buildings in our Community to advocate for reduced energy consumption. We will also continue our digitalisation process with GIS to ensure that we use the best technology to ensure that our spaces are at the forefront of innovative sustainable practices.

ENERGY, WATER AND WASTE MANAGEMENT

JUMEIRAH LAKES TOWERS[3]

We significantly improved the water quality of the JLT lakes during the year by activating an interim bore-well that also helped prevent the lakes from drying out. In the coming year, we will launch our new bore-well project to produce clean water for refilling the lakes and reduce our reliance on chemicals for cleaning.

Energy, Water and Waste Performance 2018/2019/2020

Indicator	2018	2019	2020
Energy Usage (GJ)[4]	44,725 GJ (5290 tCO2)	45,410 GJ (5371 tCO2)	44,869 GJ (5307 tCO2)
Water consumption (m3)[5]	33,409 m3 (174 tCO2)	34,595 m3 (180 tCO2)	35,396 m3 (185 tCO2)
Treated Sewage Effluent (m3)	527,826	462,249	779,957
Waste collected (tonnes)[6]	20,192	27,015	26,584.52
Recycled waste (tonnes)	123	128.4	151.6

UPTOWN DUBAI DISTRICT

Uptown Dubai is one of the city's upcoming residential and commercial districts with a range of high-end facilities such as world-class dining, unique retail outlets, a central entertainment plaza and some of the world's most recognised hotels and businesses.

At Uptown Dubai, our vision is to introduce several innovatively built environment features that will integrate luxury with sustainability.

This year, within Uptown Dubai, we launched our feature project - the 340-metre high

[3]The area was referenced as 'Master Community' in the 2019 report
[4]CO2 emissions have been calculated using DEWA's 2018 grid emission factor for Electricity 0.4258 tCO2e/MWh
[5]CO2 emissions have been calculated using DEWA's 2018 grid emission factor for Water 23.69 tCO2e/MIG
[6]DMCC Master Community collects waste data in cubic metres. To ensure reporting consistency with the 2018 and 2019 Sustainability Report, which used a conversion factor for the average density for different domestic solid waste components as 143.77 kg/m3. The original source: https://www.researchgate.net/publication/261357543_Composition_of_Domestic_Solid_Waste_and_The_Determin ation_of_its_Density_Moisture_Content_A_case_study_for_Tikrit_City_Iraq

Uptown Tower. This tower will complement our sustainability vision by achieving a LEED Gold certification. The tower will also feature an advanced energy microgrid recently awarded the Construction Week Sustainability Initiative of the Year – a highly commended honour. This microgrid system will help reduce the carbon footprint of construction by more than 50% and energy costs by 20%.

The construction site of Uptown Dubai features solar PV panels. To date, this is the largest solar plant powering a construction site. Furthermore, based on our 2021 plans, Uptown Dubai will be the first Building Information Management (BIM) & Computer-Aided Facilities Management (CAFM) managed facility within our portfolio, promising very significant operational cost efficiencies and savings.

Energy, Water and Waste Performance 2018/2019/2020

Indicator	2018	2019	2020
Renewable fuel sources - Solar power (GJ)	N/A	67	1945
Non-Renewable fuel sources (GJ) Diesel consumption Electricity from the main grid[7]	569	2711	6547 3410 GJ (403 tCO2)
Water consumption (m3)[8]	2152 m3 (11 tCO2)	15,914 m3 (83 tCO2)	49,393 m3 (258 tCO2)
Waste (Reuse and landfill) (tonnes)	233	3897	6486.12
Recycled waste Hazardous (gallons) Non-hazardous (tonnes)	0.6	60 17.39	5.4 (waste oil) 545.79

DMCC TEA AND COFFEE CENTRES

Our Tea and Coffee Centres – two purpose-built facilities in the Jebel Ali Free Zone Authority (JAFZA) - have helped transform Dubai into a global hub for tea and coffee trade. The Tea Centre is the largest site for re-exporting tea globally, and the Coffee Centre serves as a one-stop-shop for coffee giants across the globe.

Both these centres include areas for processing, packing, storage, and commerce, and they have an environmental impact that we are always monitoring to ensure optimal operations with efficient energy management, water consumption and waste generation.

2020 was an outstanding year for our Coffee Centre as we completed the handling of more than 10,000 metric tonnes of coffee beans. The increase is primarily due to the 1,100% increase in coffee roasted and packed at our centre.

The Tea Centre also had an increase of 48.7% of bulk volumes processed, which resulted in an increase of energy usage, waste consumption and waste collected. As the recycling of waste depends on the waste management provider located in Jebel Ali Free Zone, DMCC is looking for a solution to improve the process in 2021.

DMCC Tea Centre Energy, Water and Waste Performance 2019/2020

Indicator	2019	2020
Energy usage (GJ)[9]	3,679 GJ (435 tCO2)	3,922.81 GJ (464 tCO2)
Water consumption (m3)[10]	5,565 m3 (29 tCO2)	7,284 m3 (38 tCO2)[11]
Waste collected (tonnes)	289	1080
Recycled waste (tonnes)	37.79	27.54

DMCC Coffee Centre Energy, Water and Waste Performance 2019/2020[16]

Indicator	2019	2020
Energy usage (GJ)[12]	5,400.9 GJ (639 tCO2)	6,533.94 GJ (773 tCO2)
Water consumption (m3)[13]	N/A	1231.66 m3 (6 tCO2)[14]
Waste collected (tonnes)	84	360
Recycled waste (tonnes)	2	0[15]

[7]CO2 emissions have been calculated using DEWA's 2018 grid emission factor for Electricity 0.4258 tCO2e/MWh
[8]CO2 emissions have been calculated using DEWA's 2018 grid emission factor for Water 23.69 tCO2e/MIG
[9]CO2 emissions have been calculated using DEWA's 2018 grid emission factor for Electricity 0.4258 tCO2e/MWh
[10]CO2 emissions have been calculated using DEWA's 2018 grid emission factor for Water 23.69 tCO2e/MIG
[11]Increase in manpower and the utilisation of two pantries to maintain social distancing due to COVID -19
[12]CO2 emissions have been calculated using DEWA's 2018 grid emission factor for Electricity 0.4258 tCO2e/MWh
[13]CO2 emissions have been calculated using DEWA's 2018 grid emission factor for Water 23.69 tCO2e/MIG
[14]2 sub metres were installed in the Coffee Centre for Warehouse B and C
[15]Production in 2020 was minimal, and therefore there was no recycled waste generated
[16]The coffee centre became fully operational in 2019 and therefore data for 2018 has not been included

ONE JLT

One JLT is our flagship green building situated in the Master Community. One JLT is a premium LEED Gold Standard building that offers energy-efficient commercial space. The building has offices and retail space that come in either shell and core or fitted settings and provides a convenient location due to its proximity to Dubai's main road, and public transportation stops.

One JLT is a sustainable space that mixes indoor greenery into workstation zones and collaboration areas. It's LEED Gold certification means that it has several features that minimise its impact on the environment by focusing on energy and resource-efficiency, generating less waste, storage and collection of recyclables, renewable energy use (solar car shades), and indoor water use reduction. Since its certification, One JLT has continued to improve in its performance and efficiency due to the processes put in place in line with the LEED Gold building standard, including the diversion of waste from landfills and reduced energy consumption through efficient retrofitting.

In 2020, we completed One JLT's retrofitting project – this has resulted in substantial energy reductions during the year. The initial capital invested by DMCC in this project was recovered within the first three months of implementation due to the cost savings in energy consumption.

One JLT Energy, Water and Waste Performance 2018/2019/2020

Indicator	2018	2019	2020
Energy usage (GJ)[17]	10,541.37 GJ (1247 tCO2)	10,990.10 GJ (1300 tCO2)	9,080.76 GJ (1074 tCO2)
Water consumption (m3)[18]	8,535.19 m3 (45 tCO2)	10,032.40 m3 (52 tCO2)	8,685.21 m3 (45 tCO2)
Waste collected (tonnes)[19]	464.55	655	729
Recycled waste (tonnes)	1.82	2.62	4.12

CASE STUDY: ONE JLT ENERGY RETROFIT

The electricity consumption for the years 2018, 2019 and 2020 was plotted and analysed to identify the three-year trend. The electricity consumption has reduced after the retrofit and continues to be lower than both the baseline and 2019 periods.

[17]CO2 emissions have been calculated using DEWA's 2018 grid emission factor for Electricity 0.4258 tCO2e/MWh
[18]CO2 emissions have been calculated using DEWA's 2018 grid emission factor for Water 23.69 tCO2e/MIG
[19]One JLT collects waste data in cubic metres. To ensure reporting consistency with the 2018 and 2019 Sustainability Report, which used a conversion factor for the average density for different domestic solid waste components as 143.77 kg/m3. The original source: https://www.researchgate.net/publication/261357543_Composition_of_Domestic_Solid_Waste_and_The_Determin ation_of_its_Density_Moisture_Content_A_case_study_for_Tikrit_City_Iraq

We also plotted and analysed the chilled water consumption for 2018, 2019 and 2020 to identify the trend. Our analysis again shows significant savings in chilled water consumption as an interactive effect of the ECMs installed.

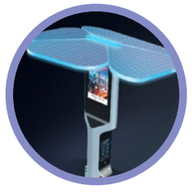
In summary, we have achieved our target of guaranteed annual electricity savings of 23% in a matter of eight months; in addition to the 41% savings in chilled water consumption. Collectively, these have resulted in savings of close to AED 821,592 over eight months.

DMCC'S SMART AND SUSTAINABLE DISTRICT

For the past 19 years, we have focused on building places that bring value to everyone. The spaces created are not just meeting current expectations of owners, residents and visitors today, but are also preparing for tomorrow. This means that whatever we do is in line with Dubai's vision to be the happiest and most technologically advanced city on earth.

Through our partnership with Etisalat Digital, we have rolled out a range of smart solutions helping our Master Community become the first smart and sustainable district of its kind in the region. We are predominantly focusing our efforts on Smart Mobility and Smart Infrastructure – these areas will help us tackle our environmental impact throughout our operations, but they will also fully support and address all our stakeholders' needs. Improvements in mobility and green building standards are critical material topics for us and are managed through KPIs distinguished by our sustainability scorecard, processes under DMCC's sustainability guidelines and objectives under the 'Smart and Sustainable District Strategy'.

MAIN SMART AND SUSTAINABLE PROJECTS ROLLED OUT IN 2020:



- **Under Smart Mobility, we introduced our bike and e-scooter initiative throughout the Master Community.**
- **For Smart Visitor Parking, we enhanced our central permit parking scheme and installed visitor parking sensors in the RTA visitor parking.**

- For Smart Building & Energy Management, the One JLT Building Management System has integrated with the SDP.
- For Smart Data Collection, we have connected all environmental sensors (climate, pollution, noise, flood, waste bins, lakes) to the SDP.
- For Smart Street Lighting, new streetlights were installed and connected to the SDP.
- We designed and produced the Smart Kiosk and Public WiFi for installation in 2021.

HEALTH AND SAFETY

We aim to achieve excellence with regards to our health and safety responsibilities throughout our Master Community. Last year, our Health & Safety (H&S) practices were the centre of our efforts to effectively protect our owners, residents, and visitors' wellbeing.

We had several world-class achievements in 2020 – these are listed below. In 2021, we will continue our focus on wellbeing to safeguard our occupiers, visitors and those who work in our managed portfolio.

The boundary of this topic covers DMCC H&S performance for its permanent employees, contractors, sub-developers, the DMCC Coffee Centre, the DMCC Tea Centre and the Master Community.

CRITICAL HEALTH AND SAFETY ACHIEVEMENTS IN 2020:



- Major HVAC overhaul, cleaning and sterilisation work, and air quality testing were carried out in all of our property assets.
- Within the Master Community, air quality sensors have been installed that provide live monitoring of air quality within the District.
- We won two international safety awards from the British Safety Council (BSC):
  - March 2020 award for demonstrating a strong commitment to good health and safety management during 2019;
  - June 2020 award as the Joint Country Winner – UAE.
- Uptown Dubai reached over 7 million safe working hours.
- Eight of our colleagues started their National Examination Board in Occupational Safety and Health (NEBOSH) training.

2020			
HSE indicators	**Master Community**	**Uptown District**	**DMCC Tea and Coffee Centres**
Total hours worked	3,030,471	866,7024	532,829
Total number of lost day rate	0	0	0
Total number of lost time injuries	0	0	0
Total number of occupational illnesses/diseases rate	0	0	0
Total number of fatalities (recordable / work-related)	0	0	0
Non-compliance with environmental laws and regulations	0	0	0

2019			
HSE indicators	**Master Community**	**Uptown District**	**DMCC Tea and Coffee Centres**
Total hours worked	2,393,876	1,509,599	453,036.93
Total number of lost day rate	0	0	0
Total number of lost time injuries	0	0	0
Total number of occupational illnesses/diseases rate	0	0	1 (temporary worker fingertip amputation)
Total number of fatalities (recordable / work-related)	0	0	0
Non-compliance with environmental laws and regulations	0	0	0

2018			
HSE indicators	**Master Community**	**Uptown District**	**DMCC Tea and Coffee Centres**
Total hours worked	1,267,721	471,800	140,130
Total number of lost day rate	0	0	0
Total number of lost time injuries	1 (a security guard was physically assaulted)	0	1
Total number of occupational illnesses/diseases rate	0	0	0
Total number of fatalities (recordable / work-related)	0	0	0
Non-compliance with environmental laws and regulations	0	0	0

The amputation occurred due to building maintenance issues. Regular building maintenance audits have been scheduled to mitigate the risk of future incidents.

The HSE team collects health and safety performance data monthly for the free zone, Master Community and towers. It is through these dashboards that the team can assess risks routinely across DMCC properties and improve current systems. To elevate efficiency, a health and safety software solution was procured in 2020 and will be launched in 2021 that will automate data related to accidents, inspections and injuries. The medium-term ambition is to increase the number of data points tracked through the system.

The HSE team and HR department oversee all professionals working towards the health and safety of the entity. Confidential information sits with the HR department. Workers report risk-related hazards and hazardous situations to the HSE team or their line managers. They are informed of this process during the induction programme offered to all new employees. At Uptown specifically, there is a monthly safety award that incentivises employees to report on such situations. Health, Safety and Environmental measures in the Coffee Centre are aligned to the requirements of an integrated management system framework consisting of ISO 9001/14001 and 45001 to enable future certification to the standards. The next step will be to investigate the practicality of implementing the system at other DMCC business units.

DMCC prescribes to international standards like the British Safety Council and the implementation of Nebosh training to mitigate risks and prevent critical hazards. Nebosh training take place once a year and require a two-hour examination at the end of the course which assesses the employees' understanding of key H&S issues. In the UAE, health and safety requirements fall under the Federal Labour Law, which DMCC upholds along with Dubai Local Order 61 of 1991.

COVID-19 RESPONSE AT OUR MASTER COMMUNITY

Following the outbreak of the COVID-19 pandemic in early 2020, our Group Security team took the lead in implementing the requirements of the NCEMA, Dubai Supreme Committee of Crises and Disaster Management and DHA. This prompt action to introduce onsite initiatives to improve operative safety has helped us achieve high levels of health and wellbeing in the past year.

We developed a 'Response to COVID-19 Cases' protocol for all Tower Managers within the JLT community. Part of this protocol was to maintain and update a database to confirmed COVID-19 cases within the JLT Community. Out of a total of 90,000 occupants in JLT, we had 800 COVID-19 cases reported (<1%).

All DMCC service providers were strictly instructed to adhere to all Government regulations for COVID-19 precautionary measures as enforced within our operations. Additionally, the security service provider management teams were advised to undertake many operative contingency plans to include response plans for confirmed positive cases with COVID-19 tracing of close contacts and quarantine provisions for employees. We also emphasised the need for temperature screening and monitoring employees' health status whilst on duty and within their accommodation units.

We also created a set of beneficial guidelines for businesses registered and operating in our Free Zone. These guidelines covered essential employment measures related to remote work, paid and unpaid leave, and temporary salary reduction. Moving forward, we will ensure that the guidelines also help businesses navigate issues around returning to normal business operations, and collecting and sharing their employees' data for health, safety and wellbeing purposes.