



SUSTAINABLE CITY

INFRASTRUCTURE IMPROVEMENTS

At DMCC, we look after creating infrastructure where our stakeholders can live, work and thrive. The spaces are designed and dedicated to helping our members, residents, and visitors achieve their objectives. We are committed to providing a safe, healthy, and sustainable environment to our stakeholders; these elements represent the key focus areas of our operation and day-to-day processes.

Located at the heart of Dubai, our Master Community consists of residential, commercial, retail, and leisure destinations and includes three districts: Jumeirah Lakes Towers (JLT), Uptown Dubai, and the Jewellery and Gemplex.

In this section, we are covering the strategy and critical ongoing projects implemented by DMCC to maintain our positive impact on stakeholders' lives within the community and the measures taken to ensure our alignment with the UAE and Dubai's strategy focused on sustainable development.



LANDSCAPE BEAUTIFICATION

As part of the large-scale project to enhance the existing infrastructure and community assets in Jumeirah Lakes Towers, we have completely rebuilt the public areas around the metro stations to improve the experience of the residents and visitors.

We have also started to replace all lake borewells and fascia panels, a significant enhancement that's been due for a long time, and we are happy to confirm that the works will be completed in 2022.

Throughout our engagement with the community in 2020, we have also learnt that there was a strong demand for more public areas focused on fitness and community engagement. This has been our top priority, and four more fitness stations, two half basketball courts, and a new large fitness station in the JLT park are to be opened by the Q3 of 2022. The construction has already begun, and the projects are on track.





ENHANCEMENT OF EXISTING INFRASTRUCTURE

In 2021, we introduced a new system to manage traffic and improve mobility around the parking areas, addressing the requests and feedback of our residents. The system will be further upgraded to make transportation as seamless as possible.

As part of the improvements in our community focused on health and safety, we plan to install smart pedestrian crossings to improve their visibility. The construction will begin in March 2022 and be completed by the end of April.

DMCC is also planning to launch a complete structural evaluation of public areas and parking structures in twenty-five clusters of Jumeirah Lakes Towers. The goal is to identify all defects and repairs required to be addressed.

This includes installing design-based solutions for lighting, air-conditioning and ventilation fan retrofitting. The projected energy consumption reduction is 45% from the assets to be part of the project.

SOLAR PANEL CAR PARKING SHADE INSTALLATION

In line with the UAE's and Dubai's decarbonisation and energy strategy, we are building a 6.3MW solar parking shade project across 17 locations in the Jumeirah Lakes Towers, which are expected to save over 7,612 MWh annually.

The project will result in a significant reduction in power consumption tariffs for the district, generating savings each year for property owners, making Jumeirah Lakes Towers district more affordable for residents and tenants alike. The project is funded from the cost savings achieved by the energy generation, and therefore there will be no added cost to the community members.

The work is set to commence in March 2022, with additional DMCC assets and other energy reduction initiatives set to join the scheme in the coming period.





ENERGY, WATER AND WASTE MANAGEMENT

In addition to all ongoing and future infrastructure improvements, we continue addressing our environmental impact and responsibilities through regular monitoring of our operation and continuous performance improvement.

For Jumeirah Lakes Towers, the energy and water consumption data are sourced from the Master Community facility management provider, Concordia, which logs the data manually based on the bills received from Dubai Electricity and Water Authority (DEWA)¹. The waste data is provided by Bee'ah, the only waste management provider in the Master Community.

For the DMCC assets, such as our offices in Almas Tower, One JLT, and Tea and Coffee Centres, the energy, water and waste data are provided by our current facility management supplier, Mace Macro. For the Uptown Dubai District, all data is provided by Besix Group, the construction company that manages the construction process of the district.

JUMEIRAH LAKES TOWERS

In addition to all ongoing and future infrastructure improvements, we continue addressing our environmental impact and responsibilities through regular monitoring of our operation and continuous performance improvement.

This year we launched our new bore-well project to produce clean water to refill the lakes and

The data is then verified through Measurabl, the platform adopted by DMCC that tracks consumption across all our assets without human involvement by analysing all DEWA bills and cross-referencing them with each meter location. This system helps us to cross-check each data point and eliminate any potential human errors that happened in the past. It also allows us to notice the unusual spikes for each location and take the necessary measures to identify and tackle the issues.

CO₂ emissions have been calculated using DEWA's 2018 grid emission factor as 0.4258 tCO₂e/MWh for electricity and 23.69 tCO₂e/MIG for water.

The energy and water are sourced from DEWA. The DMCC-appointed 3rd party contractor approved by Dubai Municipality (DM) is responsible for effluent discharge, which follows local standards and DM guidelines.

reduce the reliance on cleaning chemicals. The solution is part of our continuous efforts to improve water quality in JLT lakes significantly.

In line with Dubai's target to reduce energy demand by 30% by 2030, a collaboration between towers and towers association has been proposed to

reduce energy consumption across the Master Community.

The partnership between DMCC and Etihad ESCO looks to provide the buildings within the Master Community with retrofitting energy solutions to reduce energy consumption and contribute to Dubai's Demand Side Management Strategy 2030 and its target to achieve 3 30% energy and water savings by 2030. Partnership agreement finalisation is

expected to be completed by 2022. To date progress continue to be made with Provis Building Management managed towers and Almas Tower.

Despite the increase in consumption in the community overall due to increased demand and more available public areas, we reduced the energy consumption by 710.43GJ² by adjusting the operations and switching off the lights in low-use areas after 11 PM.

Energy, Water and Waste Performance ³ 2019/2020/2021			
Indicator	2019	2020	2021
Energy Usage (GJ)	45,410 (5,371 tCO ₂)	44,869 (5,307 tCO ₂)	45,576 (5,390 tCO ₂)
Water Consumption (MI)	34.5 (180 tCO ₂)	35.4 (185 tCO ₂)	33.3 (173 tCO ₂)
Treated Sewage Effluent (MI)	462	780	369
General Waste (tonnes)	27,015	26,584	16,258.97
Recycled	128.4	151.6	138.39
Composted			547.92
Landfill	26,886.6	26,432.4	15,572.66
Hazardous Waste (tonnes)			1.8
Recycled			1.8

UPTOWN DUBAI DISTRICT

Uptown Dubai is one of the city's upcoming projects. The district is a multi-function community consisting of residential and commercial spaces. The district will provide visitors and residents with a wide range of entertainment destinations consisting of world-class F&B, retail outlets, a central entertainment plaza, and hotels.

¹ UAE's only utility provider of energy and water.

² The calculation is done by comparing the baseline as the rate per hour prior to the adjustment and the current one.
³ All waste is disposed, recycled or diverted from the landfill off-site. DMCC doesn't have the capabilities to manage waste. This process is currently managed by the external contractor.



The LEED Gold Certification project features highly efficient advanced systems to reduce building carbon emissions through energy saving and clean energy usage through solar panels. Uptown Dubai is the first Building Information Management (BIM) and Computer-Aided Facilities Management (CAFM) managed facility within our portfolio, with significant operational cost efficiencies and savings.

DMCC is constructing the district through the main contractor, Besix Group, who manages and procures the required sub-contractors. DMCC oversees the construction process directly through six employees located on the site from the DMCC Property and HSE departments.

The energy is mainly sourced from solar panels, the energy grid and fuel used to power vehicles on the site. The types of water used in the project include:

- Potable water delivered via tankers (used for construction activities, drinking purposes and welfare
- Saltwater delivered via tankers (used for dust suppression purposes only)

The sewage from project facilities is disposed of at the municipal sewage treatment plants via tankers, with 32MI disposed of this year. DMCC follows the local rules and regulations issued by Dubai Municipality.

The waste generated at the project can broadly be categorised into eight waste streams:

Recyclable: non-hazardous waste

- Wood waste
- Paper and cardboard waste
- Plastic waste
- Steel/metal waste
- Concrete waste

Non-recyclable: non-hazardous waste

- General waste
- Food waste

Hazardous waste:

- non-recyclable (used oils, empty chemical containers, oily rags, expired chemicals etc.)

The waste collected from the project is segregated into these multiple waste streams and sent to relevant authorised recycling/landfill facilities through authorised waste transporters. Each transporter submits a monthly waste report along with the supporting evidence, verified and logged by the onsite Besix environmental sustainability team. The data is then uploaded to DMCC's account in Measurabl for further verification and storage.

Regular site inspections are carried out to ensure that the waste management practices are aligned with the project waste management plan. Immediate

correction actions are taken if any deviations are observed.

The 3R principle – reduce/reuse and recycle is followed in the project to manage its waste with the sole purpose of diverting the maximum amount from landfill. The project targets a minimum of 75% waste diversion from landfill, and the current average waste diversion rate is 85%.

A project-specific construction and demolition waste management plan has been developed, assessing its impact and enlisting relevant control measures to guide the project in implementing efficient waste management practices and monitor the same.

Energy, Water and Waste Performance 2019/2020/2021										
Indicator		2019	2020	2021						
Renewable fuel sources - Solar power (GJ)		67	1384	727 ⁴						
Non-Renewable fuel sources (GJ)		826.251	1,044.440	572,524 (1,539 tCO ₂ ⁴)						
Diesel consumption		(2,222 tCO ₂)	(2,809 tCO ₂)	8,583 (1,015 tCO ₂)						
Electricity from the main grid ⁵		None	1,542 (182 tCO ₂)							
Water consumption (MI) ⁶		15.7	48.9	63.9 ⁵		(333 tCO ₂)				
		(82 tCO ₂)	(258 tCO ₂)							

Recycled Waste					Landfilled			Sub-Total	Total (Tonnes)	% of Waste Diverted from Landfill
Wood Waste (Tonnes)	Paper and Cardboard Waste (Tonnes)	Plastic Waste (Tonnes)	Steel and Metal Waste (Tonnes)	Concrete Waste (Tonnes)	General Waste (Tonnes)	Hazardous Waste (Tonnes)	Organic Waste (Tonnes)	Recycled (Tonnes)		
323.50	10.78	17.52	230.03	5,759.60	592.50	60.91	435.63	6,341.43	7,430.46	85.34%

⁴ Additional 375.5 GJ was generated by solar panels; however, the excess was given back to the DEWA grid.

⁵ Calculation methodology is based on US Environmental Protection Agency formula of 10,180grams of CO₂/gallon of diesel

⁶ Sweet water - 51.7MI, salt water 12.2MI

DMCC TEA AND COFFEE CENTRES

At DMCC, we continue to evaluate the efficiency of our existing infrastructure, including our flagship Coffee and Tea Centres in Jebel Ali Free Zone. We have considered retrofitting both buildings to enhance their environmental performance; however, we decided to develop a long-term project plan to do it strategically.

To have a full-fledged strategy, we have onboarded a Director of Agri-Commodities who is now responsible for the development of a roadmap and management of the operations of both centres.

While we continue to monitor our daily consumption, we will be able to present a detailed outlook on future infrastructure improvements and plans in 2022.

Meanwhile, in 2021 we started the conversation for an agreement with Etihad ESCO to install a solar roof at the DMCC Coffee Centre; this will allow achieving an estimated saving of 774K AED/year. The project is expected to be completed by the end of 2022.

The general waste from the centres is deposited at the allocated site assigned by Dubai Municipality, and IMDAAD, a third-party waste management company, collects it. There is currently no opportunity to adjust the processes and procedures, as IMDAAD is the only company that operates in Jebel Ali Free Zone, where the centres are located. Provided that we are limited to the actions we can undertake, DMCC tracks the data monthly.

Coffee Centre - Energy, Water and Waste Performance 2020/2021

Indicator	2020	2021
Energy usage (GJ)	6,533.94 (773 tCO ₂)	7,152.48 (846 tCO ₂)
Water consumption (MI)	1.2 (6 tCO ₂)	1.4 (7 tCO ₂)
General waste (tonnes)	360	Not applicable ⁷
Recycled		2.2
Landfill		
Hazardous waste (tonnes)	0	0
Recycled		

Tea Centre - Energy, Water and Waste Performance 2020/2021

Indicator	2020	2021
Energy usage (GJ)	3,922.81 (464 tCO ₂)	4,175.51 (494 tCO ₂)
Water consumption (MI)	7.28 (38 tCO ₂)	4.28 (22 tCO ₂)
General waste (tonnes)	155 ⁸	249
Recycled	27.54	13
Landfill	127.46	236
Hazardous waste (tonnes)	0	0
Recycled		

⁷ The data is not collected as the Coffee Centre utilises the waste storage facilities of the Tea centre.
⁸ Waste data has been collected in cubic metres. To ensure reporting consistency with the previous sustainability reports, which used a conversion factor for the average density for different domestic solid waste components as 143.77 kg/m³.



ONE JLT

The LEED Gold standard building maintains its energy-efficient performance through sustainable, highly efficient fixtures and measures taken at the site. We continue focusing on energy and water efficiency, clean energy production, and waste management. In 2021 One JLT has achieved a ~16% reduction in energy consumption compared to 2020. This was achieved

through parking light retrofitting, cooling system energy management, and operational changes.

As part of our plan to reduce our carbon emissions and expand our consumption of renewable, an ongoing conversation has been carried out with Etihad ESCO to install a solar roof at One JLT. The agreement is expected to be completed by 2023.



GHG EMISSIONS

As DMCC does not have energy-intensive manufacturing processes in its value chain, our direct (scope 1) GHG emissions are limited to the fuel consumption at the Uptown District used for construction purposes. The indirect (scope 2) emissions derive from the electricity and water consumption from the energy grid used to provide lighting and cooling to our offices and public areas. In terms of other indirect (scope 3) emissions, we consider that business travel and employee commuting are material for DMCC; however, the currently available data for scope 3 is incomplete. We aim to gather the required information and provide the scope 3 data in the next year’s report.

GHG Emissions	
Indicator	2021
Direct – Scope 1	1,539 tCO ₂
Indirect – Scope 2	9,242 tCO ₂
Other indirect – Scope 3	Not available

DMCC’S SMART AND SUSTAINABLE DISTRICT

In line with Dubai’s vision to be the happiest and most technologically advanced city on earth, we look after creating spaces that meet the current expectations and needs. As part of the Dubai Smart City Initiative, we expect Smart District phase 1 to be completed and undergo testing and commissioning by 2022.

District’s security guarding and equipment will be managed by a new security model platform that will be created in 2022.

In late 2021 the smart district platform was launched; it allows capturing, storing, and reporting live environmental data through various smart sensors and devices installed around the district. The DMCC’s digital twin integrated system captures and presents the data on multiple dashboard screens. The information includes and is not limited to weather and air quality, noise level, water quality, streetlights energy consumption, and flood and waste bin sensors.

OCCUPATIONAL HEALTH AND SAFETY

At DMCC, our HSE policies, procedures and their implementation are essential to the success of our efforts to effectively protect our owners, residents, and visitors’ wellbeing. We continue to seek excellence regarding our health and safety responsibilities throughout our Master Community and DMCC assets.

DMCC has significant actual and potential positive impacts identified during the stakeholder engagement exercise. As we oversee the enforcement of the HSE rules

and regulations in our community, we can minimise potential issues that could arise from the development of the new plots or ongoing business activities by monitoring and enhancing existing infrastructure to ensure that our community’s well-being is maintained at the highest level.

Our Occupation, Health and Safety Management System, is established and implemented in line with the HSEQ plan executed by the facility management service

One JLT Energy, Water and Waste Performance 2019/2020/2021

Indicator	2019	2020	2021
Energy usage (GJ)	10,991.10 (1300 tCO ₂)	9,080.76 (1074 tCO ₂)	7,599.03 (899 tCO ₂)
Water consumption (MI)	10.03 (52 tCO ₂)	8.68 (45 tCO ₂)	12.02 (63 tCO ₂)
General waste (tonnes)	655	729	505
Recycled	2.62	4.12	11.62
Landfill	652.38	724.88	493.4
Hazardous waste (tonnes)			0.507
Recycled			0.507

provider of the Master Community. The system is based on ISO 45001 OHS management system, ISO 14001 environmental management system and ISO 9001 quality management system. All work activities within the Master Community are covered and monitored through the permits issued by the facility management provider, whose work is overseen by us.

All work activities, including non-routine, are controlled and managed through a suitable and sufficient risk assessment⁹. We ensure that these processes are implemented through regular inspections, tours and audits. The results of these audits help us to further improve through periodic HSEQ performance reviews, as all feedback, learnings and results of incident investigations are considered, reviewed and incorporated into the risk assessments and other processes as part of continual improvement.

A risk identification reporting system has been implemented to report work-related hazards and risks, which are captured through Eco-Online and CAFM systems. The HSE team and HR department oversee all professionals working towards the health and safety of the entity. Confidential information sets with the HR department.

Internal Training Programmes:

- 26 Toolbox Talks Safety Awareness programs delivered to all staff
- 865 Employees attended Basic Fundamental HSE Awareness Program

External Training Programmes:

- 32 staff attended Confined Space Training
- 21 staff attended third party Basic Firefighting Training
- 20 staff attended third party Basic First Aid Training
- 13 supervisors attended IOSH Managing Safety Course
- 10 staff attended Mobile Scaffolding Training
- 8 staff attended Rigging and Slings Training
- 7 staff attended Fire Warden Training
- 5 supervisors attended Accident/Incident Investigation Training
- 2 HSEQ staff attended NEBOSH Fire Safety Certificate Training

In 2021, an employee empowerment policy was implemented across the business; the policy empowers the workers to cease or refuse any unsafe work and escalate to management. We also have an Incident and Investigation Procedure to evaluate and assess the incidents' risks and determine the corrective actions. Department supervisors are well trained in accident investigation and reporting by a third party.

We also have a documented procedure for worker participation and consultation in the development, implementation, and evaluation of the HSE management system, which is conducted through HSEQ meetings, Toolbox Talks and classroom HSE awareness sessions. An HSEQ committee includes equal representation of the workers and their managers/supervisors. They are responsible for gathering the feedback from their team members, including contractor workers, and include it in the monthly HSEQ forum.

All employees and workers¹⁰ whose work is under the control of DMCC are covered by the occupational health and safety management system, which has been audited and certified by an external party¹¹.

In 2021, we were able to succeed in the following areas:

- Uptown Dubai reached over 13.8 million safe working hours
- Online HSE reporting system was launched
- Zero fatalities and LTI across Master Community
- Gold award from the Royal Society for the Prevention of Accidents for health and safety performance for the management of their flagship Uptown Dubai Project
- DMCC conducted fire and life safety visual audits for the Master Community. Portable Appliance Test is implemented for all power tools and equipment to ensure they are safe and do not pose any risk to users

2021 ¹²			
HSE indicatorsator	Master Community	Uptown District	DMCC Tea and Coffee Centres
Total hours worked Employees Non-employees	1,575,060 2,642,226	6,556,112	564,743
Total number of lost day rate	0	0	0
Total number of lost day rate	0	0	0
Total number of occupational illnesses/diseases rate	1 (Medical Treatment Cases (MTC) - Minor)	10 (First Aid Cases)	0
Total number of fatalities (recordable / work-related)	0	0	0
Non-compliance with environmental laws and regulations	0	0	0

In line with the enhancement of our occupational health and safety management system, a digital software solution was launched in 2021 to elevate the efficiency of our operations. The system facilitates the automation of data related to accidents, inspections, and injuries.

As part of the induction program, the process of reporting risk-related hazards and hazardous situations is communicated to all new employees. At Uptown Dubai, monthly incentives are issued to employees

reporting hazardous or risk-related work conditions.

DMCC is still evaluating the implementation of ISO 9001/14001 and 45001 across its assets; however, it is currently on hold due to the upcoming changes to the Coffee Centre's infrastructure. DMCC prescribes international standards like the British Safety Council and the implementation of Nebosh training to mitigate risks and prevent critical hazards.

⁹ Hierarchy of controls ERICPD (Eliminate, Reduce, Isolate, Control, PPEs and Discipline) is maintained. The following procedure are implemented: C-PRC-IMS-010 - Incident Reporting, Investigation and Analysis, C-PRC-IMS-HSE-004-Risk-Impact Assessment, C-PRC-IMS-022-Enterprise Risk Management.
¹⁰ The manpower including contractors is ~2000 people.
¹¹ DMCC is unable to provide the data on the specific number of workers who are not employees, as it doesn't have a system and methodology to calculate it. All workers who are not employees, whether they are providing a service in line with a direct agreement with DMCC, through sub-contractors, or through agreements between parties located within the Master Community, are subject to DMCC's occupational health and safety management system.

¹² Calculation methodology: the numbers are maintained through individual reports sent to DMCC Property Department control which then enable the monthly dashboards. Master Community incidents are logged by Concordia, Jumeirah Lakes Towers facility management provider. Depending on the severity of the cases, they are escalated to DMCC Asset Management and HSE team. In addition, security reports of any incidents are circulated to key personnel, and a documented report follows, which is sent to the relevant internal stakeholders.
Issues flagged for rectification are then delegated to DMCC and Concordia. Any issues which arise from external stakeholders within the community are dealt with by the HSE department, and DMCC issues warnings and violations as required, which could include fines. It is then the stakeholders' responsibility to close out the issues detected, which is overseen by DMCC.
All rates have been calculated based on the 1,000,000 hours approach. For 2020 and 2019 data, please refer to Sustainability Report 2020 and Sustainability Report 2019 at www.dmcc.ae/sustainability.

COMMUNITY ENGAGEMENT

As the Master Developer of the Jumeirah Lakes Towers district and a government of Dubai entity, we care about our residents and focus on improving the existing infrastructure to promote well-being and a sustainable lifestyle. We monitor the environmental impacts and act in the interests of the residents.

We organise various development programmes for our members and the wider community focused on business education. In 2021, we established a DMCC Impact Scale-Up Platform focused on supporting entrepreneurs whose strategy is aligned with achieving Sustainable Development Goals. The programme provides a 70% business discount for such companies for two years, 50% for the third year and 30% for the 4 and 5 years. In addition, DMCC, in collaboration with Companies Creating Change, will provide training to these companies for six months, leading to an investor pitch event in 2023. While going through the onboarding process, the programme will be fully launched in March 2022.

DMCC has always organised a long list of community events for the JLT and Dubai residents. As COVID-19 prevented us from doing many such events in 2020 and 2021, we strongly commit to renew all activities in 2022 and build a long-term strategy that would further support our stakeholders.

DMCC engaged its Jumeirah Lakes Towers community during the materiality assessment

to collect feedback and integrate it into the analysis. We also have a formal grievance process that the residents can follow by reporting their feedback or concerns directly to DMCC Community Management or Dubai Municipality.

We have assessed our community operations on actual and potential negative impacts and believe that those are either minimal or non-existent; to the contrary, it is our role to oversee all stakeholders that operate in JLT and ensure their compliance with our laws and regulations. One potential significant negative impact logically derives from our role as an Authority – provided that DMCC gives a business license to another entity to operate, it empowers it, which can lead to a negative impact if the company violates the law or our procedures. As we have demonstrated in this Report, DMCC established its rules and regulations in line with the international best practice standards, and we continuously act in the best interests of our community. In the instances where we don't have the authority to impact other stakeholders, there are many regulatory bodies in the UAE whom we work closely with to achieve this objective.