



SUSTAINABLE CITY

Track and improve local impact

COMMUNITY

We prioritise the community – which comprises business owners, residents, and visitors – because we know that our actions impact thousands of stakeholders. Our stakeholders also recognise this and, hence, identified it as the most important material topic. They recognise the multi-dimensional scope of influence that the DMCC community encompasses.

DMCC's environmental conservation efforts are directly in line with the Dubai Plan 2021 that prioritises the city's resources, namely that energy is used sustainably and infrastructure is built in line with green standards to provide residents with a clean and healthy environment. Furthermore, we support the UAE's national priorities, specifically the national 'Green Growth' strategy, as well as Dubai's contribution to the happiness agenda.

DMCC's key achievements towards a greener community in 2019 include:

- **Improved energy and water management and tracking systems: DMCC's 2019 priority was to ensure that energy and water management systems increased in reliability and robustness.**
- **Enhanced green buildings: Retrofitting One JLT, a U.S. Green building Council building, to improve the performance even further.**
- **Driving infrastructure through the Smart & Sustainable District Strategy: DMCC established partnerships with Etisalat and Careem to support countrywide technology and mobility ambitions as well as identify ways to increase the adoption of renewable energy sources in JLT.**

A. ENERGY, WATER, AND WASTE

A.1 MASTER COMMUNITY

DMCC has been proactive in creating a community atmosphere that is underpinned by green operations to meet customer demands and make it an eco-friendly, smart, and leisurely environment. In 2019, DMCC's achievements included:

Master Community Energy Management

In 2019, DMCC spent significant efforts to ensure that environmental data was tracked more cohesively and clearly. We continue monitoring the electricity and water consumption across the public areas of the Master Community, such as the parking

structures, lakes, streets, the central park and others.

DMCC contracted an external consultant to conduct a review of existing energy and water management systems to identify data gaps and provide recommendations. The assessment allowed us to have a better view of the numerous consumption points across the community and highlighted significant spikes in water consumption, which resulted from the obligatory cleaning of community water tanks as per the new Dubai Municipality regulations. We, thus, strengthened cross-functional collaboration to the peaks of

consumption and reduce it through using new technology and improving the efficiency of the existing resources.

DMCC also started using the new methods and tools to establish a sound baseline of the Community’s energy and water consumption. The new digital system automatically tracks and integrates all data and consumption points across the Master Community and our owned assets to allow a clear and structured view on DMCC’s footprint. In previous years, we lacked the adequate data collection tools to centralise water, energy, and waste measurement, which led to gaps in earlier reports.

DMCC’s energy and water reduction efforts contribute to Dubai’s target of energy and water reduction of 30% by 2030. From 2020, we will conduct two energy and water audits across JLT per year to ensure tracking and monitoring systems continue to deliver reliable and high-quality information. We plan to collaborate with building owners and managers to conduct energy and water audits in 80% of towers in the Master Community. We will implement technology systems to coordinate resource management and launch awareness campaigns with the involvement of our own staff to incentivise behavioural change and raise awareness on the importance of energy efficiency. We also plan to engage third-party contractors, including energy savings and management companies (ESCO), to work collaboratively with building managers to develop energy saving strategies.

Water Management

We consider our responsibility towards water stewardship and cleanliness to be important to community wellbeing. In 2019, DMCC initiated the DMCC Lake redevelopment initiative which includes policies related to water provision, monitoring, cleaning,

and maintenance. The delivery of the strategy included the installation of digital monitoring stations to ensure water levels and supply can be monitored remotely and consistently. Additionally, annual maintenance of the three lakes was implemented by cleaning, vacuuming, removing waste, and exploring non-chemical maintenance regimes.

In 2020, DMCC plans to identify the optimal source of water withdrawal for the lakes as well as to improve the surrounding lake infrastructure.

Waste Management

Our role is to facilitate a safe and reliable method of waste disposal across the Master Community as well as offer solutions to reduce the amount of waste going to landfill.

In late 2019, we secured a new waste management supplier through a tender process. Bee’ah was contracted to improve waste data tracking and increase the accessibility of sorting bins in the Community. This transition resulted in 22 new recycling stations for four types of materials – carton, paper, glass, and cans – which are all diverted from landfills. The new partnership allows for better data collection, that helps us to establish the baselines and develop KPIs focused on further improving our operations.

In 2020, DMCC plans to launch an updated waste management policy and initiate awareness campaigns on waste management and recycling opportunities in JLT. We will also engage our employees in the campaigns geared to encourage positive recycling behaviours.

A1. MASTER COMMUNITY

Master Community Energy, Water, and Waste Performance 2018/2019				
Indicator	2018	CO ₂ Emissions ¹	2019	CO ₂ Emissions
Energy Usage (GJ)	44,725.5	5,290 tCO ₂ e	45,410	5,371 tCO ₂ e
Water Consumption (m ³)	33,409	5,290 tCO ₂ e	45,410	5,371 tCO ₂ e
Recycled Materials (tonnes)	123		128.4	
Waste Collected (tonnes) ²	20,192		27,015	

A2. DMCC TEA AND COFFEE CENTRE

In 2019, DMCC also initiated environmental tracking improvements to the Tea and Coffee Centres by establishing the baseline of consumption with the next step being the establishment of the procedures and KPIs aimed and increasing the efficiency of the assets.

DMCC Tea Centre Energy, Water, and Waste Performance 2019		
Indicator	2019	CO ₂ Emissions
Energy Usage (GJ)	3,679.43	435 tCO ₂ e
Water Consumption (m ³)	5,565.93	29 tCO ₂ e
Recycled Materials (tonnes)	37.79	
Waste Collected (tonnes) ⁴	289	

DMCC Coffee Centre Energy, Water, and Waste Performance 2019		
Indicator	2019	CO ₂ Emissions
Energy Usage (GJ)	5400.9	638 tCO ₂ e
Water Consumption (m ³) ³	N/A	N/A
Recycled Materials (tonnes)	2	
Waste Collected (tonnes) ⁴	84	

¹ CO2 emissions have been calculated using DEWA’s 2018 grid emission factor for Electricity 0.4258 tCO₂e/MWh and Water 23.69 tCO₂e/MIG
² DMCC Master Community collects waste data in cubic metres. To ensure reporting consistency with the 2018 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_Determination_of_its_Density_Moisture_Content_A_case_study_for_Tikrit_City_Iraq
³ The Tea Centre water consumption includes the consumption of the Coffee Centre due to the absence of the sub-meter. DMCC plans to install a sub-meter in Coffee Centre in 2020 to track its environmental footprint accurately.
⁴ The calculations for the waste figures under the DMCC Tea and Coffee Centre operations were converted from cubic metres to tonnes to ensure consistency and comparability. The conversion factor used was calculated by taking average density for medium-level compacted waste components – paper, dry and wet compacted cardboard, kitchen-type food waste, plastic bags, glass, and concrete as 339.28 kg/m³. Source: <https://www.epa.vic.gov.au/business-and-industry/lower-your-impact/-/media/Files/bus/ERP/docs/wastematerialsdensities-data.pdf>

A3. UPTOWN DUBAI

Uptown Dubai is DMCC's newest mixed-use neighbourhood. Construction, following LEED Gold certification principles, began in 2017. In 2019, the site construction offices were 100% reusable, cabins used 100% LED lights and had efficient air-conditioning units. Construction sites have also been running on a hybrid microgrid of solar and diesel,

which has significantly reduced energy consumption.

In 2020, installation of batteries in the hybrid microgrid to capture additional solar power and reduce generator use will take place, and we will work towards temporarily connecting the solar panels to DEWA's grid to feed additional power back.

DMCC Uptown Dubai Energy, Water and Waste Performance 2018/2019		
Indicator	2018	2019
Solar Power (GJ) ⁵	N/A	67
Diesel Consumption (GJ)	569	2,711
Water Consumption (m ³)	2,152	15,914
Waste (Reuse & Landfill) (tonnes)	233	3,897
Recycled Waste	0.6	
Hazardous (gallons)		60
Non-Hazardous (tonnes)		17.39

CASE STUDY: Uptown Dubai Renewable Energy and Digitalisation

DMCC's Uptown Dubai, in collaboration with partners, leads the way in sustainable construction. In partnership with Six Construct and Enerwhere, 180 car park spots have been mounted with solar panels and are touted as the largest solar car park in the world for a construction site. The use of solar energy reduced the carbon footprint of the construction site by 50% and is supported by a 500 kWp stand-alone solar-diesel-hybrid microgrid. It is estimated that a total of 6,698 tCO₂ will be reduced, which results in a 73% reduction of emissions when compared to a conventional construction site set-up.

Secondly, DMCC's construction partner BESIX has implemented smart applications, such as 'Propergate', 'Wakecap', and 'Sablono', which have improved productivity, enhanced efficiency, reduced paper use, and significantly improved the health and safety of workers. For example, Wakecap's technology connects to workers' helmets to track ambient temperature and humidity and detect accidents to accelerate decisions made to prioritise workers' health and safety.

⁵ Data for diesel and solar power have been collected in kWh and converted to GJ using a conversion factor of 277.77

B. GREEN BUILDINGS

In 2019, to improve our environmental performance, we retrofitted the USGBC-certified One JLT building. Two electric car charging stations were added, energy and water audits were conducted, and the waste management process and

contractor were revisited, which led to an increase in recycling and waste management efficiencies. In 2020, the One JLT building will undergo an energy retrofit exercise to further increase energy efficiency.

One JLT Energy and Water Performance 2019		
Indicator	2019	CO ₂ Emissions
Energy Usage (GJ)	10,990	1,343 tCO ₂ e
Water Consumption (m ³)	10,032	52.3 tCO ₂ e
Recycled Materials (tonnes)	2.62	
Waste Collected (tonnes)	655	

Air Quality: In dedication to improve our air quality, we implemented and installed air quality metres and sensors around the community to track and provide critical data to stakeholders. In 2020, DMCC will work closely with Etisalat

to obtain air quality information on the community, plant trees to increase carbon sequestration, and coordinate with JLT towers to collaborate on the initiation of air quality audits.

C. DRIVING INFRASTRUCTURE THROUGH THE SMART AND SUSTAINABLE DISTRICT STRATEGY

Smart Mobility

In 2020, DMCC is planning to launch a number of mobility solutions for the Master Community using smart technology to deliver the following:

- Smart parking;
- Electric car charging stations;
- Bus service;
- Electric buggies.

roll out smart devices, services, and platforms to drive efficiencies across public amenities, energy consumption, asset and building management, which also includes 5G Wi-Fi available across the entire district. We have also created a virtual district that includes a geographic information system (GIS) that better manages spatial data and information sharing with partners.

Smart Infrastructure

A partnership has been launched with Etisalat to

In order to make our operations seamless, we are planning to centralise our Smart &

Sustainable District Platform with Smart Dubai and create guidelines for stakeholders in the Master Community to better align the efforts towards the sustainable community.

In addition, we also commissioned a study to evaluate the feasibility to install solar panels, to provide shade for parked vehicles as well as offset energy consumption. Smart lighting has already been implemented in two clusters in JLT. Furthermore, lighting within the landscaping areas of the community has been upgraded with higher-efficiency bulbs.

In 2020, there is a number of public realm enhancements in the pipeline that include the establishment of fitness stations located around the district, a dog park, half-sized basketball courts, a cycle track along with other landscape enhancements.

Awareness

Community members are central to our strategy and its implementation. We have

launched several awareness campaigns to highlight the added value of the upcoming improvements and the new services that will soon be available in the community to ensure that our stakeholders are updated first-hand on the implementation of the Smart & Sustainable District Strategy.

In order to enhance community engagement DMCC is developing a district community portal and a mobile app that will fully support and address the needs of all stakeholders. The new platform will further improve the journey of establishing a company in DMCC, enhance the management process of existing businesses and help companies thrive through accessing new services and interacting with peers. The residents of JLT will be able to seamlessly engage with DMCC via digital channels, learn about the upcoming community events and available services and products they require.

HEALTH AND SAFETY

We support the government of Dubai's vision and the UN SDG ambitions related to safe, smart, and sustainable cities. We have a health and safety policy that provides a foundation for measures taken to prosper. The Executive Committee oversees the policy and its associated implementations, which are operationally managed by the property department. Essential training to reduce risk and guarantee a safe work environment is non-negotiable.

DMCC's health and safety approach covers the organisation's permanent employees and extends to the contractors. DMCC's HSE guidelines support the compliance of sub-developers, the Master Community,

and member companies. DMCC's key achievements towards health and safety in 2019 include:

- **Secured British Safety Council membership.**
- **465 inspections conducted in both industrial and retail units.**
- **1 million man-hours completed in Uptown with zero lost time injury (LTI).**

In 2020, Nebosh training will be offered to eight employees from across departments.

There was one lost time injury – an employee of a subcontractor suffered an injury in the DMCC Tea Centre.