



REDUCING SINGLE-USE PLASTIC WASTE IN EDUCATION CITY

A CASE STUDY

JUNE 2020



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EXECUTIVE SUMMARY

The world's plastic pollution problem is terribly acute and single-use plastic products account for close to 50% of all plastic waste. This report highlights some of the international best practices deployed by various countries to combat this problem, as well as the approach adopted by Qatar Foundation (QF) in reducing single-use plastic consumption and waste in Education City.

HIGHLIGHTS OF SUCCESSFUL POLICIES IMPLEMENTED IN EDUCATION CITY

As a motivated participant and supporter of the government's efforts to protect the environment, QF has launched several efforts aimed at reducing plastic consumption in Education City, which include the below:



REGULATIONS

Mandated restriction of activities using regulatory instruments, permits, or SOPs

Policies and measures banning the use of single-use plastic bags and water bottles for offices and at all QF cafeterias and events, resulting in measurable avoidance of plastic waste. An average of 120,000 plastics bags previously consumed by QF per month has been avoided. Further, estimates indicate that on average 112,000 plastic bottles per month were saved by this policy.



MARKET-BASED ACTIVATION AND FINANCIAL INCENTIVES

Financial incentives and disincentives to guide behaviour toward environmentally responsible activity

Policies implemented in QF construction sites resulted in up to 20% of plastic packaging materials avoided per project and 210 kg of plastic waste recycled through an external plastic waste recycler from the Education City Stadium and Qatar Academy schools projects.



AWARENES RAISING AND INFORMATION SHARING

Variety of programs and interventions designed to inform the public and raise awareness

"Activists in Action" emerged as a Qatar Academy student-led effort with an online petition requesting Qatar's leadership to ban the use of single-use plastic bags obtaining over 7,000 signatures to date.



BEHAVIOR NUDGING

Nudging behaviors toward environmentally responsible self-motivated actions

The "Replace Plastic Bags" campaign, introduced by the QF Health Safety and Environment team as a precursor to the ban of plastic bags within Education City, is estimated to have saved 2,760 plastic bags over the 3 days during which the campaign was run, equivalent to a reduction of 91kg in CO₂ emissions.

QF AS A TESTBED FOR NATIONAL POLICY

Education City is a unique yet versatile community that makes for an invaluable testbed for policies which can be expanded at a national level. Some of these, which have been implemented and shown to be successful in reducing plastic waste in Education City, can be considered at a national context. These include:

POLICY ACTIONS TO CONSIDER



A BAN ON SINGLE-USE PLASTICS

across Education City, which includes plastic bags, water bottles and food packaging



BEHAVIOUR NUDGING

providing consumers with paper bags and other packaging options at all QF based markets



AWARENESS PROGRAMS

at educational institutions, community centres, and workplaces to educate the community on the harms of plastic pollution on the environment



PROCUREMENT POLICY CHANGES

and contractual stipulations banning the purchase or distribution of single-use plastic bottles, bags and/or plastic packaging



REPLACING PLASTIC WATER BOTTLES

at all QF offices with water coolers in all buildings

INTRODUCTION: SINGLE-USE PLASTICS ARE A GLOBAL ENVIRONMENTAL CRISIS

Referred to as a miraculous invention, plastic has upended the way we live and work.

Since its mass production in the 1950s, consumption of plastics grew at an astounding rate, surpassing all man-made materials. It is cheap, easy to make, and lightweight, yet durable enough to provide solutions in the food and beverage, car, electronics, healthcare, and many more industries. More recently, single-use plastics have become a defining feature of the fight against COVID-19, as the crisis spurred a steep rise in the demand and production of desperately needed safety plastic products, with governments racing to build their stockpiles of protective wear and citizens promptly acting to secure their share of supplies.

However, the world is unable to cope with the amount of plastic waste generated with the surge in production and consumption over the past century. Roughly half of the annual production of plastic is destined for a single-use product. Single-use plastics are convenient for packaging but are usually discarded within few minutes of first use, i.e. grocery bags, plastic cutlery, food packaging, water cups, and bottles.

As such, plastics have become one of the greater pollutants of our oceans and environment. Most plastics do not biodegrade, and instead take thousands of years to decompose into smaller fragments called micro-plastics. In the meantime, they are clogging landfills and floating around the world's oceans harming marine wildlife. Once decomposed, the microplastics seep into the soil and are then consumed by livestock, entering the human food supply chain.

Prior to the onset of the COVID-19 pandemic, many countries made significant strides toward curbing the negative impacts of single-use plastics on our environment, exploring different approaches to do so. These range from improved waste management practices, financial incentives aimed at changing habits of consumers, retailers, and manufacturers, awareness raising, as well as policies and guidelines mandated for a more sustainable and circular production of plastics. Governments have also financed national R&D capabilities aimed at the development of more sustainable alternative materials and better designed products, for example.

The role of the not-for-profit and private sectors is also crucial to protect the environment and mobilize various segments of society, such as academia, civic organizations, R&D entities, and individual households. Qatar's foremost educational,

research, and community not-for-profit organization, Qatar Foundation is eager to contribute to national efforts in achieving the Qatar National Vision 2030 and push forward the sustainability agenda to advance the wellbeing and quality of life of its community.

This report highlights some of the international best practices, tools and policies deployed by various countries to combat the plastic problem, and the approach adopted by Qatar Foundation in reducing single-use plastic consumption within its flagship project, Education City. Initiatives that have been successfully implemented by QF are showcased, along with planned and upcoming initiatives, both of which may serve as examples of what could be adopted at a wider scale across different entities and institutions in Qatar, and where applicable, may be considered as potential policy options at a national level.

THE WORLD'S PLASTIC POLLUTION PROBLEM MAY NOT BE READILY VISIBLE BUT IS TERRIBLY ACUTE:

335 million metric tons

TOTAL GLOBAL PLASTICS PRODUCTION IN 2016

Nearly **1** million

PLASTIC BOTTLES PURCHASED PER MINUTE

Up to **5** trillion

PLASTIC BAGS CONSUMED EACH YEAR

More than **8** million tons

OF PLASTIC DISCARDED IN OUR OCEANS EVERY YEAR

INTERNATIONAL EXAMPLES: COUNTRIES BANNING SINGLE-USE PLASTICS

Plastic pollution has become widely recognized as a worldwide crisis. Several countries, such as Australia and Peru, have taken steps to severely restrict single-use plastics. Others like France and Kenya have taken a harsher approach and banned them altogether. Although not many countries have implemented such strict polices, several are following suite, making announcements of the introduction of policies to be implemented to curtail single-use plastic consumption. The case for reducing single-use plastic is strong, and the table below outlines some of the approaches taken by a selection of countries. Some key measures include: a formalized vision of a desired end-state, i.e. “becoming plastic free by 2042”; imposing bans on retailers and shops to stop providing plastic bags, and/ or other single-use items like plastic bottles, straws, cups, lids; behavioural change incentives, such as a tax on plastics, charging for plastic bags, or providing reusable bags; and finally imposing penalties to law violators to ensure compliance with the policies.¹

Country	Type of policy/tools	Summary of actions taken to reduce plastic consumption
Rwanda	<ul style="list-style-type: none"> - Formalized vision: to be completely plastic free by 2020 - Strict plastic ban introduced back in 2008 - Fines and jail time for violators 	<ul style="list-style-type: none"> - Implemented a strict plastic ban in 2008. - Travelers entering Rwanda are not allowed to leave plastic bags behind. Violators face stiff fines such as jail time. - Rwanda aims to be completely plastics free by the end of 2020, with few exceptions such as plastics needed for packaging vaccines and other medicines, certain items sold at hotels, and plastics used for wrapping frozen foods. - The government urges to use paper, bamboo, or wood-base packaging as alternatives.
Morocco	<ul style="list-style-type: none"> - Strict ban on production, import, sale, and distribution of plastic bags - The ban was introduced in a staggered approach starting with a partial ban, then full ban, and addition of penalty fees over several years 	<ul style="list-style-type: none"> - After a partial ban started in 2009, Morocco banned the production and use of single-use plastics in 2016. Morocco has also banned the production, import, sale, and distribution of plastic bags across the country. - At the time the full ban was introduced, Morocco was considered the second-largest plastic bag consumer after the United States, using about 3 billion plastic bags a year according to the Industry Ministry of Morocco. - The government has taken measures to ensure enforcements. 743,600 inspections were carried out between 2016 and 2018, and 7,500 tons of plastic bags have been destroyed in the process. - Consumption of raw materials used in the manufacture of bags dropped by 50% to 35,000 tons. - Nonetheless, going plastic-free has been hard and plastic surveys from NGOs recommend that the government introduces even harsher fees.
USA	<p>Different tools and policies adopted by different cities, which include:</p> <ul style="list-style-type: none"> - Bans on plastic bag distribution at stores - Tax on plastic bags - Behavioural incentives (distribution of reusable bags) 	<p>Although no policies have been implemented at a federal level, several cities in the US have been implementing policies aimed at curtailing plastic waste.</p> <p>San Francisco, CA</p> <ul style="list-style-type: none"> - The first city in the USA to introduce a ban on plastic bags in 2007. - An analysis into the policy showed a reduction of over 70% in plastic bag pollution. <p>Washington, DC</p> <ul style="list-style-type: none"> - The U.S. capital was one of the first cities to act to end plastic pollution by imposing a tax on plastic bags in 2009. Proceeds from the tax go to a fund that works on environmental clean-up efforts and distributes reusable bags to low income and elderly communities in D.C. - It is estimated that since its implementation, the policy has achieved an 85% reduction in plastic bag consumption. <p>Seattle, WA</p> <ul style="list-style-type: none"> - In 2011, a ban was introduced on single-use plastic bags at retail stores and plastic containers and utensils at food and beverage services. Grocery stores were prohibited from providing plastic bags unless these were made from a minimum of 40% recycle materials. - A review into the policy in 2016 revealed that a 78% reduction in use of plastic bags had been achieved.

Country	Type of policy/tools	Summary of actions taken to reduce plastic consumption
UK	<ul style="list-style-type: none"> - Formalized vision: Pledge to eradicate plastic waste by 2042 - Introduction of a charge on plastic bags - Ban on the use of certain single-use products 	<ul style="list-style-type: none"> - As of October 2015, stores in the UK began charging 5 pence per single-use plastic bag. Consumers can bring their own reusable bags to avoid this charge. The policy was enforced to any business that has more than 250 employees. - UK pledges to eradicate all avoidable plastic waste by 2042 as part of a 25-year plan. - UK confirms a ban on plastic straws, drinks stirrers, and plastic stemmed cotton buds in England. To be enforced by April 2020.
Kenya	<ul style="list-style-type: none"> - Strict ban on plastic bags - Penalties for those using, selling or carrying bags 	<ul style="list-style-type: none"> - Kenya initiated a strict plastic bag ban in 2017, with heavy penalties for those who do not use reusable bags. - Penalties range from fines of 38,000 USD to four years in prison for anyone producing, selling, or even carrying bags. - As of 2020, Kenya bans single-use plastics from beaches and parks.
France	<ul style="list-style-type: none"> - Formalized vision: Ban plastic packaging by 2040 - Ban on specific plastic products from being sold/ distributed by vendors 	<ul style="list-style-type: none"> - 2017: France forbids distribution of disposable plastic bags by vendors. - January 2020: A ban on plastic plates and cups sold in bulk in supermarkets, cotton buds, and still water bottles in school catering comes into effect. - In 2021 and 2022, more items such as plastic straws, disposable cutlery, tea bags and toys distributed for free in fast food restaurants will be banned. - 2040 target of zero plastic packaging.
Australia	<ul style="list-style-type: none"> - Ban on plastic shopping bags 	<ul style="list-style-type: none"> - Queensland banned plastic shopping bags in 2018. - Two of the largest supermarkets in Australia (Coles and Woolworths) banned plastic grocery bags, which led to a 1.5 billion bags prevented from use, leading to 80% reduction in the country's overall use of single-use item over a 3-month period. - Reusable plastic bags are still available for a fee. - The South Australian Government is considering banning single-use plastic products such as straws and cutlery.
Peru	<ul style="list-style-type: none"> - Legislative ban on single-use plastic bags 	<ul style="list-style-type: none"> - In 2018, Peru's congress passed a law to phase out single-use plastic bags over three years. - Other than plastic bags, items that cannot be recycled, such as straws, will not be accepted under the law.

Country	Type of policy/tools	Summary of actions taken to reduce plastic consumption
India	<ul style="list-style-type: none"> - Formalized vision: phase out single-use plastic by 2022 - Law regulating single-use plastic on ships and ports 	<ul style="list-style-type: none"> - New law introduced in 2019 aims to reduce ships' use of single-use plastic by 90%. - The law prohibits the use of single-use plastic items onboard ships; and no plastic items are allowed on Indian ports. - Government plans to phase out single-use plastic by 2022.
Tunisia	<ul style="list-style-type: none"> - Legislative decree banning manufacturing, import and use of single-use plastic 	<ul style="list-style-type: none"> - Decree No.32 dated 16 January 2020 prohibits the manufacturing, import, and use of conventional single-use plastic. - First stage of the policy was implemented on March 1, when stores were directed to stop issuing plastic bags. - Full ban across the country to be in effect by January 2021. - Reusable bags with a thickness of 40 micrometres and capacity of more than 30 liters will remain in circulation.
Kuwait	<ul style="list-style-type: none"> - Plastic ban on its ports 	<ul style="list-style-type: none"> - Law implemented that prohibits the use of certain single-use plastic items onboard Kuwaiti and foreign ships while in port in Kuwait or in Kuwaiti waters. - Items such as plates and cups, garbage and shopping bags, and bottles up to 10 liters for water and other drinks are no longer allowed in Kuwaiti port since November 2019. - January 2020: further plastic items such as bags, containers, milk bottles, hotel drink cups, and microwave dishes are prohibited from use.
Taiwan	<ul style="list-style-type: none"> - Formalized vision: Ambitious plan to ban plastics by 2030 - First round of ban includes fines on retail stores that provide items such as plastic bags 	<ul style="list-style-type: none"> - Ambitious plans to completely ban single-use plastic cups, straws and bags by 2030. - On 1 January 2018, a policy was introduced banning large-scale retailers from providing free plastic bags. - Retail stores will face fines for giving customers disposable food containers, utensils, and plastic bags in 2020. Fees will increase by 2025.
China	<ul style="list-style-type: none"> - Ban on single use bags and other plastic products 	<ul style="list-style-type: none"> - Non-degradable bags to be banned in major cities by end of 2020 and all cities and towns by 2022. - Single-use straws to be banned in restaurants industry by end of 2020 and 30% reduction of single-use plastics by 2022.
Oman	<ul style="list-style-type: none"> - Ban on plastic bags - Fines for violators 	<ul style="list-style-type: none"> - Oman to ban single-use plastic bags starting 2021. - Violators to be fined up to 2,000 Omani riyals, or approximately 19,000 QR, with repeated offenders getting fined double the amount.
Canada	<ul style="list-style-type: none"> - Ban the use of several single-use plastics 	<ul style="list-style-type: none"> - Canada will ban harmful single-use plastics starting from 2021. - Canada will also establish targets for companies that manufacture or sell plastics, so they be responsible for plastic waste.

QATAR'S EFFORTS TO REDUCE PLASTIC WASTE

Qatar has expressed its commitment to a more sustainable environment and has assessed various measures to reduce its CO2 emissions. Qatar has committed to delivering a carbon-neutral World Cup Tournament in 2022. On a government strategy level, the Qatar National Vision 2030 outlines the need to manage the environment such that there is a balance between economic growth, social development, and environmental protection.

NATIONAL DEVELOPMENT STRATEGY I

Qatar's government identified the need for better waste management in its first National Development Strategy 2011-2016 (NDS I). Under a section for improved waste management, the strategy outlined initiatives aimed at reducing the waste levels generated in the country, whether by households, industry or commercial sites. It also outlined a plan to recycle more of the waste generated. The strategy outlines that the government recognizes the need to reduce pressure on the environment but stresses the "most preferred goal being the avoidance of waste".

One clear outcome of the environmental management strategy as outlined in the NDS I is "reduced waste, more recycling, and more efficient use". The plan proposes new policies to encourage firms to export recycled items and use recycled materials, along with improving collection networks and providing recycling bins around the country.

NATIONAL DEVELOPMENT STRATEGY II

The second National Development Strategy 2017-2022 (NDS II) found that population increases and magnified construction activity led to an increase in household and industry waste. As such, it focuses on seeking innovative solutions for waste management. It highlights policies to ensure that construction waste is recycled and used as construction materials. Plastics are listed as materials to be recycled and sets a general target to "recycle 15% of the solid waste generated by the end of 2022". Following the NDS II directives, in 2018, the Ministry of Municipality and Environment launched a campaign to raise awareness about the recycling bins and how to assist in the sorting and recycling process.

Recent efforts to encourage behavioral change have been expanded, aimed at curtailing plastic consumption, and to avoid plastic waste as outlined in the NDS I and II. The Ministry of Municipality and Environment has implemented a few awareness initiatives, such as a "Plastic Bag Free Day" in July 2019. Several activist groups have organized events like beach clean-ups and recycling drives to reduce plastic waste. Some supermarket chains provide options for reusable bags which can be purchased at checkout or can be brought in by customers. Incentives like extra loyalty points and discounts have been put in place to promote the use of reusable bags, along with a "no-plastic Tuesday" campaign in which a large supermarket chain does not provide plastic bags to customers on that day.

These initial efforts and awareness-drives for reducing single-use plastics are promising. There is opportunity for Qatar to be an active leader in this area and further introduce policies and laws aimed specifically at reducing plastic waste.

QATAR FOUNDATION'S ROLE IN SUPPORT OF NATIONAL EFFORTS

As a motivated participant and supporter of the government's efforts to protect the environment, QF has launched several efforts aimed at reducing plastic consumption in Education City, with initial successes emerging. The QF case study showcases successfully implemented and planned initiatives, all with the wider goal of reducing single-use plastic consumption, which could serve as possible examples that can be adopted at a wider scale across different entities and institutions in the country, and where applicable, be considered as potential policy options at a national level.

CASE STUDY: EDUCATION CITY

Qatar Foundation and its flagship project, Education City, is a vibrant community that brings together multiple stakeholders and segments of society to its premises. It is a prominent gathering place where many events and programs take place, and a large number of contractors are hired to offer a range of services (such as F&B and construction). Recognizing that QF is a main contributor to the country's ecological footprint, steps have been taken since 2016 towards encouraging environmental stewardship and implementing a set of policies to reduce the consumption of single-use plastics. A full list of initiatives is found in Appendix 1.

The focus of QF's efforts has been in the three sectors:
(1) education services, (2) construction, and (3) F&B and vendors. Tangible impact has been achieved at:

- **Raising awareness amongst the student body and staff on environmental stewardship**
- **Reducing plastic waste in all QF construction sites**
- **Reducing or eliminating single-use plastics in F&B outlets in Education City through QF hospitality policy changes**

Furthermore, QF has deployed a combination of tools to propel change in the desired direction. These tools include behaviour change programs and interventions, fiscal tools, as well as regulations.

01

REGULATORY INTERVENTIONS

Mandated restriction of activities using regulatory instruments, permits, licences, or SOPs

02

MARKET-BASED ACTIVATION AND FINANCIAL INCENTIVES

Financial incentives and disincentives to guide behaviour of contractors and suppliers and consumers towards environmentally responsible activity

03

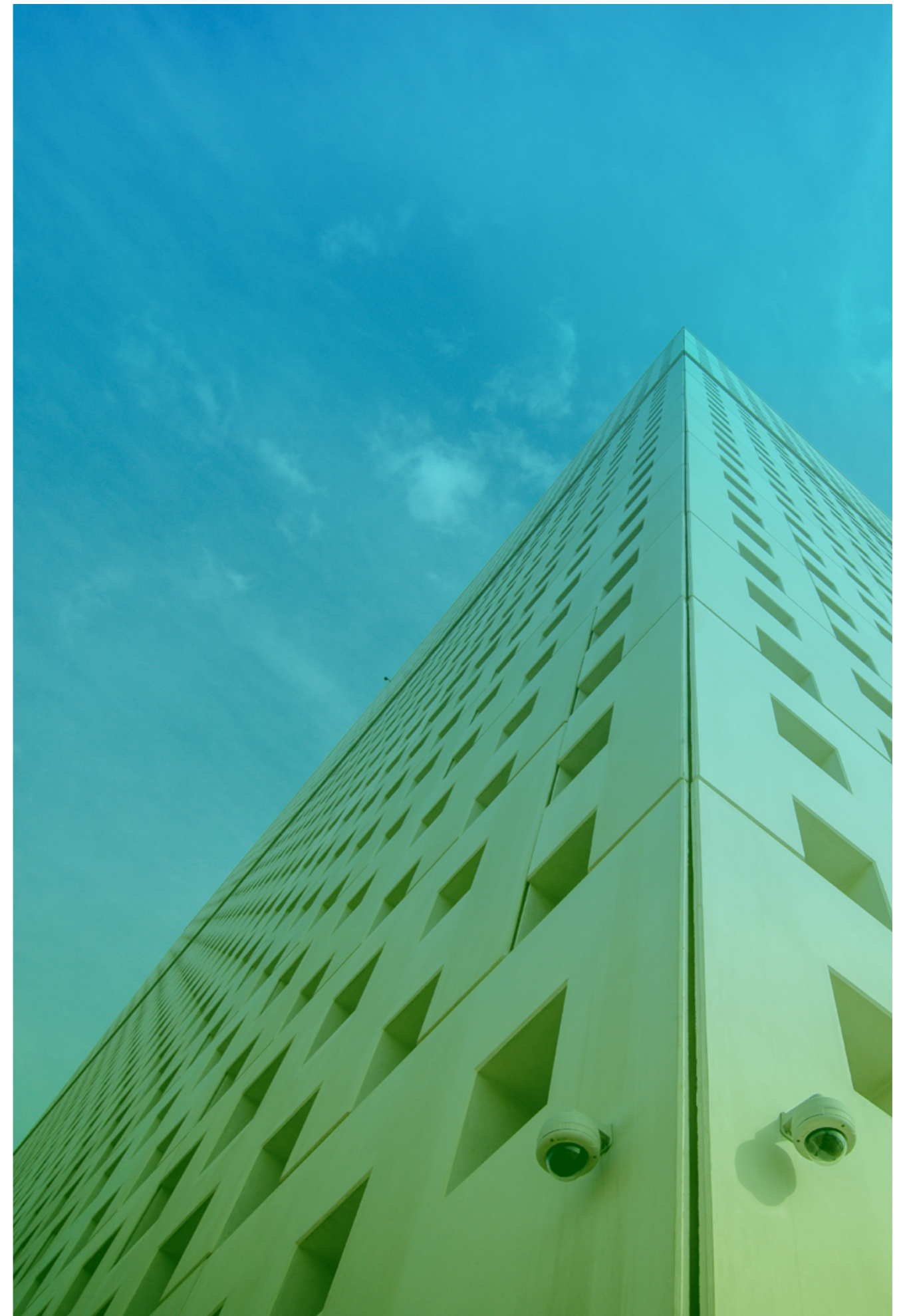
AWARENES RAISING AND INFORMATION SHARING

Variety of programs and interventions designed to inform the public and raise awareness

04

BEHAVIOR NUDGING

Nudging behaviors toward environmentally friendly self-motivated actions



01

REGULATORY INTERVENTIONS

Starting with its own internal policies, some of the initiatives that have been implemented by Qatar Foundation involved decisive actions aimed at internal purchasing practices and stipulations to external suppliers of F&B for QF buildings, associated schools, and centers.

Since 2018, several initiatives have been implemented to promote environmentally friendly practices through regulatory interventions in the form of policies and guidelines as well as incentives to adopt these, while disincentivizing and penalizing wasteful behaviour throughout Education City. While some of these are still work in progress, the full list of environmentally friendly incentives being considered for vendors are in Appendix 2.

AMENDING CONTRACTS WITH SUPPLIERS

To ensure that cafes, supermarkets on QF premises, and vendors who participate in the weekend farmers' markets are using environmentally friendly materials.

CONTRACTUAL STIPULATIONS AT ALL QF EVENTS

Tenants only allowed to sell glass water bottles and serve F&B in environmentally friendly packaging.

FOOD CONTRACTORS ASKED TO REPLACE SINGLE-USE CUTLERY INTO BIODEGRADABLE OPTIONS

Currently these take-away food containers are being sold at a cost at cafeterias. Aims to replace single-use cutlery items used at cafeterias in QF into biodegradable paper products (paper, wood, or eatable vegetable starch cutlery, biodegradable/compostable containers etc.). Although using biodegradable packaging is a step in the right direction, challenges remain with regards to adequate waste management of new packaging material, regardless of whether it is biodegradable, which recent research has shown still has negative side effects on the environment due to lack of composting stations or recyclable paper.²

MANDATED USE OF REUSABLE CUTLERY AND PACKAGING

In addition to eliminating plastic water bottle use in offices, meetings, cafeterias and events, single-use plastic packaging for meals prepared for students and some staff (such as Al Shaqab grooms) has been amended into mandated use of reusable cutlery and packaging. Most of these changes were included as regulatory changes in QF's Hospitality Policy.

02

MARKET-BASED ACTIVATION AND FINANCIAL INCENTIVES

QF actively explores and performs market research to look for suppliers that can provide eco-friendly and reusable items (such as reusable shopping bags) in any market that takes place in Education City. In addition, contractual incentives have been deployed to reward green vendors in Education City.

ACTION TARGETING CONSTRUCTION CONTRACTORS

Since 2016, QF operations team began trainings and workshops to reduce plastic waste generated from QF construction sites. The trainings were coupled with incentives for contractors to enhance construction waste segregation and improve recycling. The trainings offered contractors options they could consider, such as sourcing alternatives to plastics, bridging the gap between market offerings and the needs of vendors. The trainings delivered focused on the following topics.

REDUCING PLASTIC CONTAINERS AND PACKING MATERIALS IN CONSTRUCTION MATERIAL PROCUREMENT

Avoiding plastic packaging and covers when construction materials are delivered to the site, where plastic packages are immediately wasted.

RECYCLING PLASTIC WASTES GENERATED FROM CONSTRUCTION WORKS

LDPE, HDPE, and polypropylene plastic wastes are segregated for recycling by a recycling contractor, Twyla Recycling.

REDUCING PLASTIC WATER BOTTLES IN CONSTRUCTION SITES

Using water dispensers in construction sites instead of water bottles and providing reusable personal water bottles for site workers, where they do not have access to water dispensers.

Financial incentives are being considering and tailored to different audiences, vendors vs. consumers. For example, dual pricing mechanisms are under consideration which will make purchasing items plastic-packaged more expensive to incentivize consumers to purchase unpackaged versions of the same goods.

03

AWARENESS RAISING AND INFORMATION SHARING

To complement the above regulations mandated in the areas of education, construction, and F&B, several behaviour nudging campaigns and awareness programs have been set in place by QF and run by various teams, such as Health, Safety, Security, and Environment (HSSE), Community Development, and Operations.

QF's campaigns and information sharing events centred around different themes related to reducing the use of plastics and gearing the EC community towards making more environmentally sustainable choices. These efforts began in 2016 and continue to date. Below is a summary of trainings/workshops delivered to the education sector in QF and to the construction sector.

The focus has been to educate EC students, faculty and staff, to make them actors of change. By educating them on the negative impacts of plastic pollution, they actively encourage and welcome the policy changes to reduce plastics. This has even resulted in student groups leading initiatives to ban single-use plastic bags within QF being motivated to take it further to rally for the change in Qatar.

"SAY NO TO PLASTIC BAGS" (FEB 2020)

The program targeted engaging school youth in reducing plastic use. Qatar Academy school students formed a unified student group to lead efforts to stop single-use plastics in QF and later to campaign for banning single-use plastic bags in Qatar.

AWARENESS PROGRAM (MAY 2019)

An Informative event about the impact of plastic bags on the environment was held at Multaqa (the Education City Student Center). Reusable bags were handed out to the participants to motivate them to bring their own bags instead of opting for plastic bags.

STUDENT-TARGETED EDUCATION WORKSHOPS (FEB 2018)

The workshop aimed to educate students on the impact of plastic bottles to the environment. Students were given a short presentation followed by a taste testing session of two samples of water; one would contain water from a plastic bottle and the other sample from a drinking fountain. Most individuals have an aesthetic opinion for using plastic bottles. This workshop showcased that water used from a drinking fountain or water dispenser is no different compared to plastic bottles, encouraging students to stop using single-use plastic bottles and to opt for reusable bottles.

PLANNED AND UPCOMING WORKSHOPS FOR STUDENTS AND COMMUNITY ENGAGEMENT ACTIVITIES

- Student workshop planned in late 2020 to raise awareness on plastic's life cycle and the environmental carbon emissions impact of plastic pollution.

ACTIVISTS IN ACTION

As a result of the "Say NO to Plastic Bags" programs, a group of 45 students from Qatar Academy Doha launched a campaign to stop single-use plastic waste.

The students held an installation in early February 2020, covering the school's walls and floors with collected plastic bags, to showcase the amount of plastic waste generated by society. As a result, students were compelled to take action and launched a petition on the change.org global activist online platform.

The petition calls on Qatar's leadership to take a stance and join global efforts to reduce plastic consumption by banning the use of single-use plastic bags in Qatar. The aim is to collect more than 7,500 signatures before being presented to Qatar's leadership. By 25 May, the petition had 7,081 signatures.

- Plan for setting up a student council for each school and university to track the use of single-use plastics in schools and campuses.
- "Education City Platform Project" of virtual sessions will be launched to raise awareness about the importance of sustainability and environmentally friendly behaviors, encouraging QF's community to buy and use eco-friendly products.

04

BEHAVIOUR NUDGING

Beyond implementing changes to policy and purchasing practices in its internal operations, and actively engaging the community and increasing awareness around plastic waste, Qatar Foundation has also created incentives for people to recycle plastic waste through behavioural nudging programs.

REUSABLE LUNCHBOXES

A reusable lunchbox program was launched (on hold now due to COVID-19). It included:

- **Awareness sessions:** to teach students on the harms of single plastics are to be scheduled at QF schools.
- **Provision of reusable lunch boxes at schools:** this program would provide reusable lunch boxes to two Qatar Academy school cafeterias. It would aim to stop single-use plastic snack containers being delivered to class rooms daily.
- **Extension of the program to universities:** provision of reusable lunch boxes to university students and those who use these boxes to have discounts in QF cafeterias — aimed at minimising single-use take away containers.

PROVISION OF PAPER BAGS TO VENDORS

By the same token, in 2019, farmers at “Torba” Farmers’ Market (a weekly market for farmers and street vendors), are provided with paper bags purchased by QF instead of using their own plastic bags to encourage environmentally conscious behaviour.

PRECIOUS PLASTICS (COMING SOON)

The Precious Plastics initiative, run by QF and supported by students, consists of a make-shift workspace, where community members can drop off their plastic waste. The workshop is itself a converted shipping container within Education City that was donated by the Supreme Committee for Delivery and Legacy. It contains a series of machines and tools which grind, melt, and inject recycled plastic, which can be used to create new products, like furniture small functional objects or colourful sheets/bricks that can be used to make other products. People can use their plastic waste to create products that can be sold, therefore demonstrating the “true” value of plastic. The aim is to nudge behaviour and increase recycling of plastic via incentives to encourage people to bring in their plastic waste. The workshop is expected to begin running in November 2020 during the Sustainability Week organized by QF’s Qatar Green Building Council.

HBKU WASTE MANAGEMENT APPLICATION (COMING SOON)

Hamad Bin Khalifa University has developed a waste management application ‘QKONS’ to facilitate waste recycling. The app connects waste producers to recycling companies, rewarding the producers for their efforts in collecting, segregating, and disposing waste to enhance the recycling process. The app is planned to be piloted in Education City late 2020.

GREEN ISLAND (COMING SOON)

A dedicated area is being launched to support waste segregation and recycling within Education City. “Green Island” which will be located in Education City premises, will house various recycling partners, allowing them to install their own containers for the community to directly contribute to waste segregation and recycling. Several private partners are already engaged.

INITIAL OUTCOMES

The actions taken by Qatar Foundation have resulted in a reduction of the number of water bottles, single-use plastic bags, and plastic disposables consumed. A more ambitious and aggressive approach is planned for 2021 where penalties applied on waste generation are being considered.

The impact analysis of some of the policies has taken place, and the data presented below represent initial findings of measurable outcomes. Although the wider impacts are yet to be fully measured, they represent a solid step in the right direction.



SINGLE-USE PLASTIC WATER BOTTLES
HAVE BEEN BANNED IN EDUCATION CITY

Current consumption is near zero, avoiding 112,000 bottle being wasted:
~50,000 bottles per month saved from office services
~12,000 bottles per month avoided from QF cafeterias and events
~50,000 bottles per month saved from school-packed meals



SINGLE-USE PLASTIC BAGS HAVE
BEEN BANNED IN EDUCATION CITY

Current consumption is near zero, avoiding waste as below:
- Average 120,000 plastic bags per month avoided at QF
- Reduce Plastic Bag Campaign: 2,760 bags were saved over 3 days, equivalent to a reduction of 91kg in CO₂ emissions



POLICIES WERE INTRODUCED TO REDUCE
PLASTIC WASTE IN CONSTRUCTION PROJECTS

These policies have led to:
- 20% of plastic packaging avoided in projects
- 210kg of plastic waste recycled from the Education City Stadium and Qatar Academy school projects (Academyati/QAST)

Additionally, market-based activation programs have led to changes in the packaging options provided by vendors within Qatar Foundation. Some examples of this are Lulu Express and the Flat White café, who have replaced their packaging with more environmentally friendly options after these were suggested during a workshop by the QF team. A few tenants have expanded these sustainability initiatives to some of their other locations.



QF AS A TESTBED AND RESEARCH PARTNER FOR NATIONAL POLICY

Education City is a unique yet versatile community that makes for an invaluable testbed for policies which can serve as examples for the national level. Further, different policies and tools can be deployed within Education City to target consumers and producers to nudge behavioural change.

As showcased in the case study, Qatar Foundation has taken several actions, including implementing policy changes and awareness drives, from which some tangible results are already emerging. These actions can be taken beyond Education City and perhaps even explored in a national context.

EXAMPLES



Ban on single-use plastics across Education City, which includes plastic bags, water bottles and food packaging



Procurement policy changes and contractual stipulations banning the purchase or distribution of plastic bottles and/or plastic packaging



Replacing plastic water bottles at Qatar Foundation offices by providing water coolers in all buildings



Awareness programs at educational institutions, community centres, and workplaces to educate the community on the harms of plastic pollution on the environment



Behaviour nudging by providing consumers with paper bags at all QF based markets

The development of a national ecosystem around plastic waste reduction is needed to see further tangible outcomes outside of Education City. To this effect, Qatar Foundation can support national efforts by testing policies or piloting programs within Education City and providing analysis and research to support Qatar in identifying the best policies and tools to reduce plastic waste.

APPENDIX 1: LIST OF POLICIES IMPLEMENTED AT EDUCATION CITY

Initiative	Start Date	Type of Initiative
Revise catering contracts for 0 waste	Jun-20	Policy change
Define eco-guidelines for EC outlets	Feb-20	Guidelines
Help QF partners to transition	Feb-20	Policy change
Contract incentives for green vendors	Feb-20	Contract
Eco-price tags on all goods	Feb-20	Contract
Change catering policy for meeting	Feb-20	Policy
Apply penalties on waste generation	Jan-21	Contract
Green Island	Sep-19	Behavior change
Plastic / aluminium / paper containers	Mar-20	Behavior change
Compost organic waste (compostable bags)	Dec-19	Behavior change
Collect and use plastic caps	Sep-19	Behavior change
Recycling tracker (QR code video)	Jun-20	Behavior change

REDUCING PLASTIC WASTE IN ALL QF CONSTRUCTION SITES

Initiative	Start Date	Target Audience	Tool for Implementation	Implementation Tracking	Impact
Reducing plastic containers and packing materials in construction material procurement (avoiding plastic packaging and covers when construction materials are delivered to the site, where plastic packages are immediately wasted)	2016	Construction Contractors	Provide specification and continuous training	Weekly tracking the quantity of plastic wastes generated from construction works	Encourage recycling of waste plastics
Recycling plastic wastes generated from construction works (LDPE, HDPE, and polypropylene plastic wastes are segregated for recycling by a recycling contractor, Twyla Recycling)	2017		Training	Weekly tracking the quantity of plastic wastes generated from construction works	Enhance construction waste segregation to improve recycling rate
Reducing plastic water bottles in construction sites (Using water dispensers in construction site instead of water bottles and providing reusable personal water bottles for site workers, where they don't have access to water dispensers)	2017		Workshop and training		Stop procuring plastic water bottles and provide more water dispensers

REDUCING OR ELIMINATING SINGLE-USE PLASTICS IN F&B OUTLETS IN EDUCATION CITY THROUGH QF HOSPITALITY POLICY CHANGES

Starting with its own internal policies, some of the initiatives that have been implemented by the Qatar Foundation operations team to date involve decisive actions aimed at internal practices of purchasing and stipulated to external suppliers of F&B to the Foundation and associated schools and centres.

Initiative	Start Date	Target Audience	Communication Medium	Financial Costs	Policy Change?	Impact
Eliminate single-use plastic water bottles from office pantries	Jan -19	All QF staff served through QF managed pantries	E-mail	Provision of water dispensers provided to staff	Yes. Included within Hospitality Policy under management signature	Number of water bottles utilized was reduced
Eliminate single-use plastic disposables in QF pantries	Jan-20		N/A	N/A		Plastic disposables reduced
Eliminate single-use plastic water bottles from QF managed cafeterias and events	Jan-19	Staff, students, faculty	N/A	No impact, cash and carry business		Cost savings from no longer ordering plastic bottles
Eliminate single-use plastic bags from cafeterias	May-19		HSE Campaign	No impact, cash and carry business	No	Reduction in previously used plastic bags
Reduce single-use plastic in classroom packed meals	Dec-19	School students	Liaison with school focal points	One-time expense of procurement of reusable boxes.	Included within Hospitality Policy under management signature	Reduction in number of water bottles and other disposables used for packing
Eliminate plastic disposables in meals packed for Al Shaqab Grooms	Aug-20	Al Shaqab Grooms	Liaison with Al Shaqab focal points	One-time expense of procurement of reusable boxes.	No	Reduction in number of disposables previously ordered

APPENDIX 2: QF's ENVIRONMENTALLY FRIENDLY INCENTIVES FOR VENDORS

CONTRACTS

To encourage environmentally friendly behaviour in Education City, new terms and conditions have been added to QF new/renewed contracts:

a) F&B Outlets

- Environmentally friendly food packaging and take-away bags (or biodegradable and it must be proven by certificate and communicated to EC community).
- Environmentally friendly cutlery and straws.
- Ready-made drinks and water bottles should be in glass containers (or other eco-friendly packaging if available).

b) Cafes

- QAR 2 off when using reusable mugs (tenant or customer own mug).
- Environmentally friendly food packaging and take-away bags (or biodegradable and it must be proven by certificate and communicated to Education City community).
- Environmentally friendly cutlery and straws.
- Water bottles and other drinks should be in glass containers (or other eco-friendly packaging if available).
- Encourage long-term leases to have a nice café setup and, in winter, outdoor seating to drive dine-in footfall to reduce take-away orders (reduce number of disposables).

c) Supermarkets

- Environmentally friendly food packaging and take-away bags (or biodegradable and it must be proven by certificate and communicated to Education City community).
- We encourage tenants to sell water bottles and other drinks in glass containers (or other eco-friendly packaging if available). However, in order to make sure that prices are convenient for all EC community, we cannot fully eliminate plastic options yet as they are still the only available option in the market with a convenient price.

EDUCATION CITY PLATFORM PROJECT

Negotiated with Eco-friendly suppliers to introduce and sell their products in the platform to allow SME's and home businesses to explore eco-friendly packaging and other business essential products and provide private sessions and consultations on the importance of reducing usage of plastic. In addition, they will provide an opportunity for the public to buy sustainable products (coming soon).

MARKETS

a) Farmers Market – “Torba”:

- QF has provided farmers selling at the market with paper bags.

b) Friday Market:

- QF has provided farmers selling at the market with paper bags.
- Farmers were asked to sell plant pots to encourage people to plant trees.

POP-UPS

Introduced pop-ups in several locations around Education City, not only to support entrepreneurs but also as an opportunity to encourage the community to walk around the city and drive less (aiming to reduce pollution).

EVENTS

For two years, during QF National Sport Day, tenants were only allowed to sell glass water bottles and serve F&B in environmentally friendly packaging. Some of the tenants listed below have expanded their sustainable packaging to other store locations.

List of newly signed/renewed contracts who shifted to sustainability terms and conditions:

Tenant	Education City Location
All tenants of QF HQ Café	2015 building (QF HQ)
Filicori Zechenni	Humanitarium (GU-Q building)
Graze	Multaqa
Which Wich	Multaqa
Flat White café	Multaqa
CAF café	Multaqa
AMP Coffee Bar	Multaqa
Papa Johns	Multaqa
Zaatar w Zeit	Multaqa
Al Naimi Cafeteria	Ceremonial Green Spine
Coffee Bean & Tea Leaf	Canvus (VCUarts Qatar building)
Costa Café	Manufactory (TAMUQ building)
Safahat	QNL
Icons	Minaretein
Tom N Toms	RDI
Pick N Save	Tram stop
Tenants of QF NSD	Ceremonial Green Spine

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NOTES:

1. At the time of writing this report, many countries are temporarily halting or rolling back some of these guidelines as they struggle to contain the COVID-19 pandemic.
2. Some of the changes implemented at QF have been put on hold due to safety concerns related to COVID-19.

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