



جامعة جورجتاون قطر
GEORGETOWN UNIVERSITY QATAR

Sustainability Action Plan

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Executive Summary

According to the university President, Dr. John J. DeGioia, “Environmental sustainability is one of the defining challenges of our time. At Georgetown we are committed to engaging in research, teaching and operational practices that address this challenge and help us minimize our impact on the environment” (Georgetown University). Despite unique challenges in the Qatari environment, Georgetown University in Qatar can be committed to environmental sustainability. This Sustainability Action Plan was written as a guide to help GUQ continue to lead Education City in environmental sustainability.

There is currently no financial incentive for GUQ to reduce electricity use, water use or volume of waste. This action plan focuses on low-cost and no cost achievable action steps that GUQ can implement to improve environmental sustainability awareness and improve operations.

Engagement and Education

To promote sustainability awareness to the faculty and staff, the plan proposes to establish a green office program. The FIT department would host two field trips each year, and the QF HSSE department will hold a water taste test in the atrium. To engage students, GUQ will introduce sustainability into the Student Leadership Certificate Program and integrate the concept into Student Club Leader Training.

Protection of Natural Resources

In an effort to protect natural resources, the plan proposes a number of initiatives including: central printing, weekly tire pressure checks, improved recycling and waste stream, plug timers, door maintenance, optimized irrigation, and using reusable plates. The FIT department needs accurate data to recognize problems and successes. It must commit to regular, accurate data collection and reporting through a sustainability scorecard.

Leverage Main Campus and Qatar Foundation

Main Campus and Qatar Foundation have resources available that GUQ can access to improve its sustainability. Main Campus now has an Office of Sustainability with two full time people who are eager to engage GUQ on a regular basis, share best practices and help. It also hosts a monthly sustainability working group. Qatar Foundation has an HSSE team with an Environmental Specialist assigned to GUQ.

Publicize GUQ Achievement

GUQ is already engaged in sustainability research and activities, but there is no central entity promoting these achievements. The plan recommends to set up a qatar.sfs.georgetown.edu website that promotes the sustainability efforts and achievements across the campus, in operations, research, and student activities.

Responsibilities

The Associate Director for Auxiliary Services will lead the Sustainability efforts at GUQ with support from Communications, Student Development, the rest of FIT, and eventually a Green Team. The plan offers a table of timelines and accountable people for each step to ensure that the plan moves forward despite personnel change.



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List of Abbreviations

ADAS – Associate Director for Auxiliary Services

CFITO - Chief Facilities and Information Technology Officer

CIRS – Center for International and Regional Studies

FIT – Facilities and Information Technology Department (Georgetown University in Qatar)

GHG- Green House Gas

GU- Georgetown University

GUQ – Georgetown University in Qatar

HELP – Hoya Empowerment and Learning Program

MTCO₂E- Metric Tons of Carbon Dioxide Equivalent

QF – Qatar Foundation

QFFM – Qatar Foundation Facilities Management

QF HSSE – Qatar Foundation Health Safety Security and Environment.

QNRF – Qatar National Research Fund

SAP- Sustainability Action Plan

SFS- School of Foreign Service (Georgetown University)

SOP- Standard Operating Procedure



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Background

Georgetown University in Qatar (GUQ) is a branch campus located in Doha, Qatar. Founded in 2005, it follows the Jesuit values and programs of the main campus in Washington, DC. The school offers four undergraduate majors within the School of Foreign Service as well as community classes and special programs.

The university in Qatar is housed in a 40,000m² purpose-built facility designed by Legoretta + Legoretta. GUQ has approximately 150 FTE employees, plus 110 contractors in the building along with 270 full time students. As an open campus, an average of 100 visitors per day use the library or attend public events. The building also hosts the University College of London – Qatar.

According to the university President, Dr. John J. DeGioia, “Environmental sustainability is one of the defining challenges of our time. At Georgetown we are committed to engaging in research, teaching and operational practices that address this challenge and help us minimize our impact on the environment” (Georgetown University). The Sustainability Action Plan for the Qatar campus is in line with the Jesuit values of “men and women for others,” “faith and justice,” and institutional goals of improved sustainability. The plan also helps GUQ align itself with the forth pillar of Qatar Vision 2030, which calls for responsible environmental development and protection of natural resources (GSDP 2008).

Achievements to date

GUQ has implemented a number of operational environmental initiatives. Many of Georgetown’s successes have been embraced by Qatar Foundation and have expanded to the greater QF community. GUQ launched paper, plastic, and metal recycling, then handed that operation to QF to continue on a larger scale. It demonstrated the cost and energy-effectiveness of LED lightbulbs, leading Qatar Foundation to expand an exchange of bulbs throughout Education City. It has created an employee bus program that has been embraced by the neighboring schools. It has reduced electricity, paper, and plastic water bottle consumption. GUQ discontinued offering plastic water bottles at meetings, an action that QF recently incorporated into its standard operating procedures. The university has been tracking some environmental data, such as paper purchases and electricity use since 2011. GUQ began tracking other data, including potable water use, chilled water use, and Green House Gas emissions from business travel in March of 2015. Ford Middle East recognized GUQ’s programs with a conservation grant in 2013 and the Facilities Team received a Team Sustainability Award from QF in 2012.

In the academic space, GUQ has conducted considerable research on sustainability topics. Although GUQ is not specifically focused on the environment and does not have an environmental science major, climate change, water issues and sustainability are crucial to economics, politics, migration, and international relations. For GUQ faculty and students to consider current affairs, they must understand the changing environment. The Center for International and Regional Studies has held working groups and lectures tied to sustainability themes. It has published books and working papers, notably “Conservation in Qatar: Impacts of Increasing Industrialization,” *Food Security in the Middle East*, “Qatar’s Natural Sustainability: Plan’s Perceptions and Pitfalls,” and *The Gulf Monarchies and Climate Change: Abu Dhabi and Qatar in the Era of Natural Unsustainability*. Students have received QNRF research grants funding sustainability research on Qatar Foundation. Zeynep Topogolu is currently working on a QNRF grant-funded sustainability project: Safeguarding Food and Environment in Qatar. Appendix 2 includes a list of books, articles, and lectures related to sustainability that are available on the GUQ website.



QF has implemented environmentally friendly initiatives that benefit GUQ. QF cleaning services use green chemicals in the daily cleaning of all buildings. QF Transport operates a shuttle service around campus, which will soon be replaced by the People Mover. QF Capital Projects Division has invested in photovoltaic panels on the roof of the GUQ building and other buildings in Education City.

Considerations

GUQ does not pay for utilities. The building is only six years old, fit with efficient appliances and systems, low-flow toilets, and aerators in the sinks. It has motion-sensor and timer-enable lighting systems. The building is owned and maintained by Qatar Foundation, so any upgrades in appliances need QF's approval and funding. GUQ does not capture direct cost savings in energy, building efficiency, or material waste reduction. As a result, this Sustainability Action Plan focuses largely on inexpensive programs that will address behavior and awareness.

Although Sustainability typically considers the social, economic, and environmental triple bottom line, this action plan focuses mostly on environment, not on social justice. As a Jesuit institution, GUQ is already heavily invested in and focused on social justice. All areas of the school – academic, student clubs, and campus services concentrate on social justice in theory and practice. Since social justice is already integrated into the fabric of GUQ, this plan is limited to environmental sustainability.

Personnel change is an additional challenge to consider. Given the organizational structure and history, the Associate Director for Auxiliary Services is the most appropriate person to manage sustainability at GUQ, but this position will be vacant in September and October. The new ADAS who is joining in November will need time to orient herself to GUQ and may find it challenging to jump immediately into sustainability when she has other responsibilities competing for her time.

Client Requirements

1. Recommend methods to economically reduce GUQ's carbon footprint
2. Recommend student and community learning opportunities about environmental sustainability
3. Recommend methods to increase sustainability awareness
4. Reduce consumption of natural resources, reuse resources, and increase recycling
5. Leverage work being done on sustainability on the Main Campus and in CIRS. Build on that work, adopt or localize.
6. Publicize the works and improvements within GU, Qatar, and the region.
7. Provide an implementation plan for all items listed above

Recommended Initiatives

The recommended initiatives are focused in four general areas: Engagement and Education, Protection of Natural Resources, Leveraging Main Campus' and Qatar Foundation's Expertise and Resources, and Publicizing Works.

Engagement & Education

Georgetown's primary function is education. GUQ aims to educate future world leaders. GUQ must focus on sustainability engagement and education for faculty, staff, and



students to improve local sustainability knowledge and awareness. A Green Office Program will concentrate on faculty and staff, while specific student engagement strategies will address the student body.

University-wide Engagement Opportunities

Field Trips

The FIT Department, in association with the sustainability club, can offer at least 1 field trip each semester. The trips would generally have no cost associated except for staff time. QF Transportation will provide shuttles at no cost. Appendix 1 lists possible field trips with contact information.

Water Taste-test

The Qatar Foundation HSSE department has agreed to hold a taste test in the atrium offering samples of water fresh from the GUQ water fountain vs. Qatarat bottled water. Along with this stand, the HSSE department can share facts with the community about the quality of the water in Qatar Foundation and can provide the water test results from the GUQ building.

Student Engagement

Club Leader Training

The Student Development department works with club leaders throughout the year on leadership skills and provides orientation and training on Georgetown processes and initiatives. Each semester, there is a large training session for the student leaders. The ADAS can attend these training sessions to discuss how the students can integrate environmental sustainability into their clubs and daily life.

Integration into Student Leadership Certificate Program

The Assistant Director of Student Leadership Development has created a Leadership Certificate program for students which consists of a series of workshops. She has agreed that Sustainability can be a topic of one of the workshops. Additionally, sustainability can become part of the associated badging system if there is a local expert who can present a series of three workshops on sustainability. Appendix 6 provides a list of potential local instructors.

Sustainability Club

GUQ has supported various forms of a student Sustainability Club over the years. Unfortunately, in the past, when active seniors have graduated, the club had occasionally dissolved, but has then resurfaced in subsequent years. There is an active green club this year. Particularly in light of the elimination of the Student Development Officer position, the ADAS should serve as an advisor to this group. During September and November, when there is no one in the ADAS position, another member of the FIT department can serve the advisory role.

Green Office Program

A GUQ Green Office Program will help to encourage sustainable behavior change. The program targets faculty and staff, but because GUQ is a small community, students will see the promotional materials around the building and may also benefit from the awareness campaign.

Harvard and Yale both offer Green Office programs and find that they are helpful in engaging the faculty and staff. Both schools said that after a department participates as a



green office, it often then consults the office of sustainability for ways to make its processes and operations more environmentally friendly (D. Havelik, personal communication, July 7, 2016 and S. Compton, personal communication, July 13, 2016). The GU Main Campus launched a Green Office program in 2011, but was unable to maintain it due to limited staff resources (A. Stewart, personal communication, July 16, 2015). According to members of the Yale, Harvard, and Georgetown Offices of Sustainability, the most important element of a successful green office program is simplicity.

In the GUQ model, individuals would volunteer to participate by committing to achieve 5 of 9 actions on a checklist. When they make this commitment, participants receive a sticker to place on their office doors. In future years, the program could become more rigorous with another level for people who truly embrace sustainable behavior. Since GUQ does not have sufficient resources to check on the participants, it is strictly a voluntary honor system used to promote awareness.

As recognition, the dean can read the names of new participants at each Town Hall. These names can also be listed on the Green Office section of the proposed sustainability webpage.

The checklist:

A Green Office Participant Commits to 5 of the following 9 behaviors

1. Take the bus or carpool regularly
2. Take the stairs, not the elevator
3. Only use reusable dishes, mugs, glasses at work
4. Turn off the computer, monitor, and printer nightly
5. Turn off the lights when you leave the office
6. Close the door when you enter and leave the building
7. Recycle paper, plastic, metal at work
8. Bring in recycling from home
9. Set printer default to double sided, use the back of single-sided paper for scrap and drafts



Figure 1: Green Office Door Sticker



Figure 2: Sticky Note

As a method to reinforce positive behavior, the night shift cleaners will be instructed to leave a thank you sticky note on office desks or computer monitors when they see positive behavior. Despite the standard level of English of many night-shift cleaners, the cleaners can be trained through Tool-Box Talks, and on occasion, a member of the FIT team can assist. The FIT team can work with the Hoya Empowerment Language Program (HELP) to integrate training into the Help classes. This would have an added benefit of increasing sustainability awareness among the student-teachers and the contractors.



To support the program, there will be a monthly series of posters emailed and posted throughout the building. Ideally, once the digital signage system is operational, the digital display will replace paper posters. The posters will give tips on the sustainability theme of the month. Possible themes for each month and actions are printed below. They are aimed to coincide with GUQ events or initiatives and can be updated or changed as needed.



Figure 3: Sample Poster 1

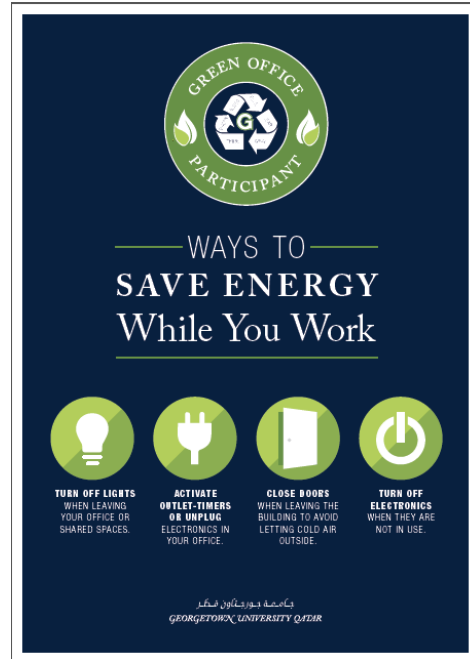


Figure 4: Sample Poster 2

September – Reduce Waste

- reusable containers
- rechargeable batteries
- fix it first
- donate to the Bazaar

October – Save Water at Home

- shower timer
- turn off the tap
- use dishwasher
- flush smart

November – Reduce, Reuse, & Recycle: Paper

- ‘e’: don’t print
- centralized printing
- scratch paper for drafts/ notes
- buy recycled & recycle

January- Reduce Carbon Emissions: Vehicles

- take the shuttle
- carpool
- use the E-bikes

February- Reduce Carbon Emissions: Air Travel & Shipping

- videoconference
- buy from local ethical vendors
- ebooks

March – Reduce Food Waste

- take only what you’ll eat
- compost what you can
- plan the week’s meal
- use-by v. expiration dates

April - Save Energy

- turn it off
- plug timers
- close doors



Protection of Natural Resources

GUQ can continue to reduce its use of energy, water, and raw materials. It can reduce the amount of waste that is sent to landfill. This section addresses specific operational steps that will reduce GUQ's carbon footprint and use of natural resources.

Green House Gas Inventory

GUQ calculated its first Green House Gas inventory in the spring of 2015 using 2014 data. At the time, much data was not available, so the 2014 inventory was based on a number of estimates. For example, the travel contractor did not begin recording GHG emissions until March of 2015, which is also when GUQ began to read the newly installed water meter.

In both years, the inventory considers scope 1, 2, and 3 emissions from the GUQ building and contracts operating under GUQ control. It does not consider the employee or student housing, which are not operated by GUQ. It also does not include GHG emissions related to shipping, as DHL has been unable to provide the data required. It does not consider the GHG emissions related to product purchases such as paper and other materials.

With the exception of the chilled water volume, potable water volume, and business travel miles which were all estimates in 2014, the 2015 inventory used the same data sources as 2014. In all cases, the 2015 inventory used the same GHG calculation methods as in 2014. According to the sustainability data collected over the past two years, GUQ reduced its Green House Gas Emissions 8% from 5270 MTCO₂E in 2014 to 4823 MTCO₂E in 2015, but that reduction is overstated since the 2014 GHG Emission Inventory was based on inaccurate estimations. The Electricity and Fleet emission reductions are based on continuous data.

Green House Gas Emissions in MTCO ₂ e			
		2014	2015
Scope 1	Generator	1.2	1.2
	BBQ	0.2	0.2
	Fleet	224	165
Scope 2	Electricity	2471	2351
	Chilled Water*	787	1671
Scope 3	Waste	50	54
	Potable Water*	23	16
	Business Travel*	1614	470
	Commuting	100	95
Total		5270.4	4823.4

* estimates from 2014 that do not appear to be very accurate

Figure 5: 2014 & 2015 GHG Emissions Inventory

The 2015 GHG Inventory indicates that electricity and chilled water are responsible for the majority of Green House Gas emissions and should be the area of focus for efforts.



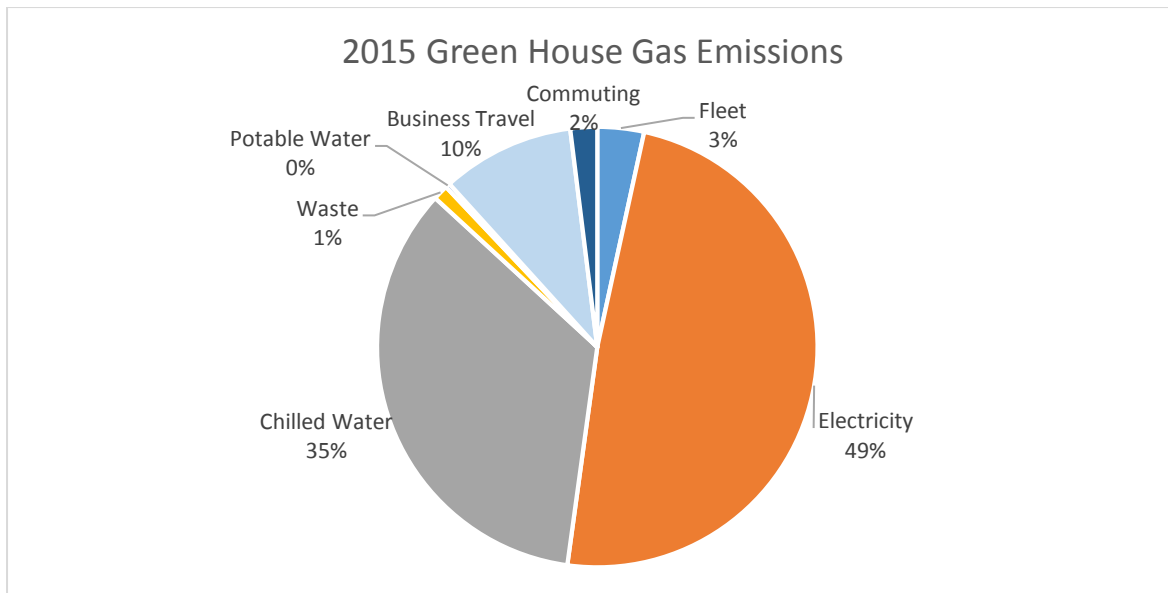


Figure 6: 2015 GUQ GHG Emissions

Sustainability Scorecard

The compilation of data for the 2015 Green House Gas inventory led to the discovery of inconsistencies in GUQ's data. The waste and recycling figures that Qatar Foundation and Al Mukhtar provided do not match the weights recorded by the cleaning team on site. Additionally, the trends suggested by the figures do not make sense. For example, the data provided would suggest that GUQ general waste in Dec 2015 was half of the Dec 2014 level, but there was no noticeable change in behavior to explain this supposed reduction. The on-site cleaning supervisor's data does not show the same reduction in waste. It also appears that on certain evenings the recyclables were not being recorded, and the supervisor believes that those nights, the recyclables may have been mixed with general trash.

Additionally, some data that GUQ first started tracking in March of 2015, such as business travel GHG emissions, water use, and chilled water use, was tracked inconsistently over the year. For travel, GHG emissions were only tracked for trips originating outside of Doha, not for trips originating in Doha. Also, no flights were recorded between June and August. Some of the utilities figures were not measured in the Fall of 2015, or were recorded with significant errors.

If a sustainability scorecard is maintained regularly, then it will be easy to spot inconsistencies in data recording right away, and more importantly, it would help to notice operational issues immediately.

The following items can be highlighted on the score card:

- Building Electricity use
- Photovoltaic electricity generation
- Chilled Water Usage
- Waste figures – general, food, and recycling
- Potable Water Usage
- Paper purchases

For future:

- Shuttle Rider Figures
- Chilled Water vs. Cooling Degree Days
- Green House Gas Emissions from business travel



Sample Sustainability Scorecard

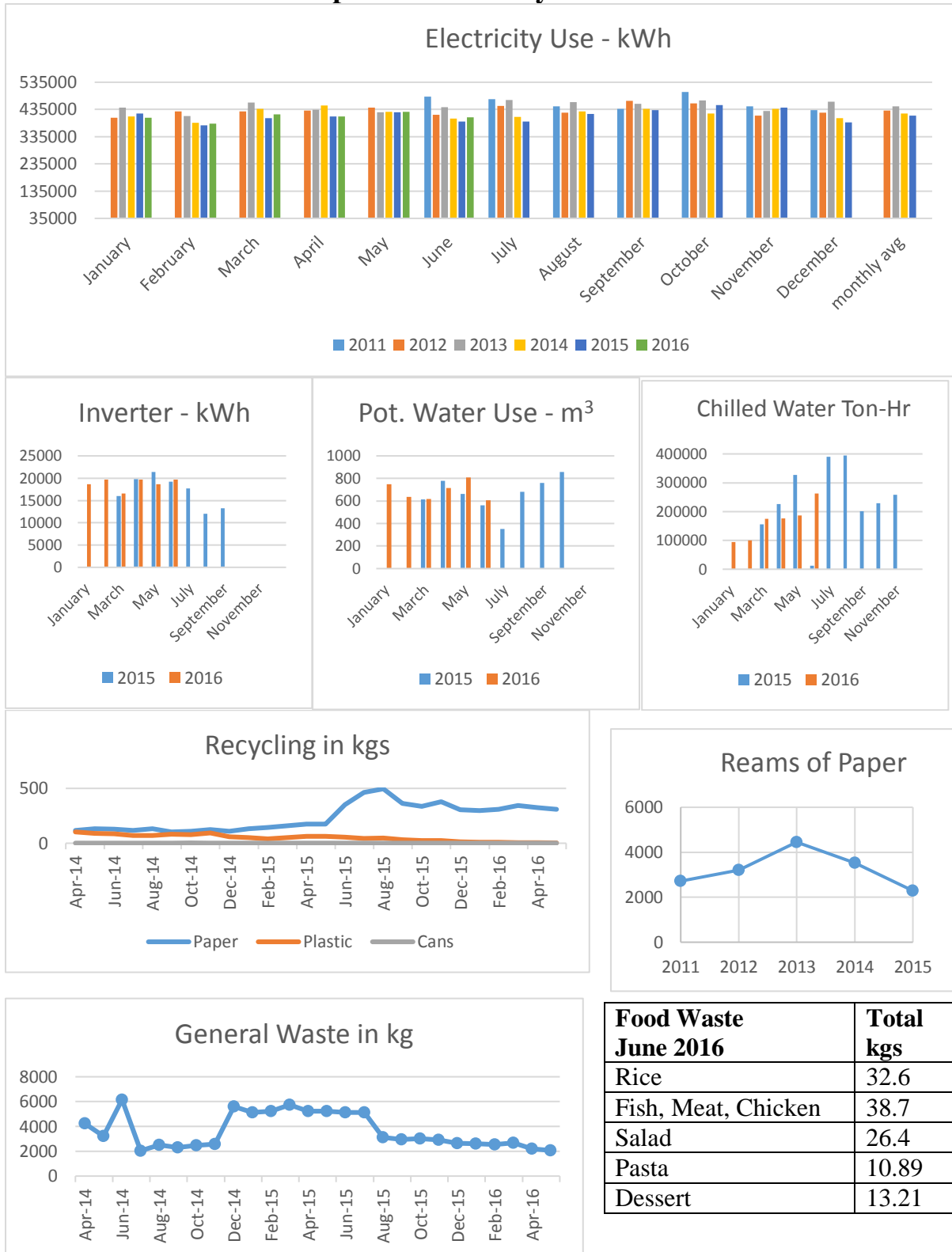


Figure 7: Sample Sustainability Scorecard



Reduce Electricity and Cooling Consumption in building

Centralized Printing

In the Fall, FIT will phase out the desktop printers in each office and move to a card-swipe activated central printing system. In 23 work areas throughout the building, one central multi-function printer will replace two machines - a printer and copier, currently located next to each other. One multi-function machine will use less energy than the two machines. It will reduce the amount of energy consumed by multiple machines, reduce the heat load associated with them, and save space. The energy consumption figures for each printer type are available in appendix 3.



Figure 9: Current photocopier and printer



Figure 8: New multi-function solution



Figure 10: Typical desk-top printer

When each individual office printer needs a new toner cartridge, it will be retired. The staff members will then use a nearby central printer. Of the current 160 office printers, 40 are Xerox 3220 which use 60 W on Standby mode, about 20 are HP 2015, which use 7 W on sleep mode, and the remaining are HP 2055 which use 8 W in ready/ sleep mode (HP 2016, Xerox 2015). The printers are always in standby mode if not in use, including

at night. Assuming the printers are on standby 23 hours per day/ 365 days a year, this is 990 kWh of power that is simply wasted. Elimination of the office printers saves this electricity.

In addition to electricity and cooling savings, GUQ will realize money, paper, toner, and labor savings. The printer will default to double-sided, black and white printing which will save toner and paper resources. The central printing will discourage unnecessary printing, and encourage physical activity. Additionally, the streamlining of models will reduce the manpower required to manage the current inventory of printer 55 different types of cartridges for various printers throughout the building. These printers also require maintenance kits, fuser kits, and other parts that must be ordered and installed. It will simplify maintenance by limiting the printers to one model type. The FIT team has estimated that the switch to the multifunction printer will be a cost savings of approximately \$100,000 per year (C. Wait, personal communications, August 11, 2016).



Plug Timers

There are currently 12 plug timers in storage. These can be added to water coolers in staff pantries so that they turn off at night and do not drain electricity. This will make a small improvement in electrical consumption, but has no direct financial cost and requires only an hour of initial installation.

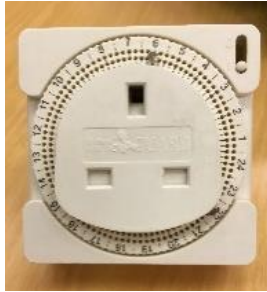


Figure 11: Plug Timer available at GUQ

Although it has not been possible to find electricity use data on the particular water coolers at GUQ, at Hauser Hall on Harvard's campus, a similar water cooler used .68kWh of power over night. Over 365 nights, and 12 machines, the timers that are already in the storage room would save 2978 kWh per year (McSorley et al, 2014). This is equivalent to approximately 1/3 of a day of GUQ's annual electricity use. Plug timers are available locally at Ikea. Since there is no cost to GUQ for electricity, there would be no financial return on an investment in more timers, but the plug timers do offer an inexpensive way to reduce GUQ's GHG emissions and impact on the environment.



Figure 12: Standard Water Cooler at GUQ

Door Maintenance and Upgrades



Figure 13: Open gap between doors in Segment E, Lower Ground Floor



Figure 14: Large Door gap in the Majlis

Many of the exterior doors have 1/2 inch gaps around them where the weather stripping has folded away or is not present. There are also large gaps in the top and bottom corners of some doorways. The Building Operations team should complete a survey of all the exterior doors in the building and present the findings to Qatar Foundation for repairs.

In addition to reducing the heat load, better seals around the doors and thresholds at the bottoms of the doors will help with dust control and pest prevention. A threshold would also help to prevent the water damage to wooden floors near doorways.

Three sets of glass doors are left open regularly: the door in Figure 13 and the doors to the smoking areas. When these doors are left open, they allow the heat and humidity to enter the building and can cause condensation in the areas near those corridors. The User Support suite is showing signs of damage from this condensation. When the smoking doors are left open, the cigarette smell enters the building, and on the 1st floor, it blows down the hallway which is unpleasant and unhealthy. Adding an automated-closing mechanism to these doors would improve the energy efficiency and comfort of

the building. The doors are particularly challenging to fix because they are glass. The worst doors could be replaced with a different frame.



Lighting

Although the building has a smart lighting system that allows the lights to be programmed to turn off and on at specific times in different corridors and areas, the settings seem to go awry over time. Figure 15 shows an exterior light that was on in the middle of the day. Most likely, the setting was changed for testing, or an event, and was not switched back. Once a semester, building operations should perform an audit at 12:00pm and 8:00pm to check that the appropriate lights are on or off.



Figure 15: Exterior light on at 12:00 noon

The GUQ building is fit-out with motion-sensor based lights in the offices and corridors. Unfortunately, the motion-sensor lights operate on the same frequency as the Wi-Fi routers. After years of poor Wi-Fi coverage, the FIT department discovered the problem and disabled the motion sensors. The FIT team is working with Qatar Foundation to find a solution so that both systems can operate properly. Until the motion sensor conflict is resolved, GUQ must remind the community to turn lights off when they leave a room.

Reduce Water consumption in building

Correct irrigation of landscape

There are planting areas outside of the building that are green from mold and other growth despite the desert setting. Building Operations should perform a survey of the grounds to determine which parts of the landscape are being over-watered and work with QF Landscaping to correct the irrigation. In addition to water waste, the stagnant water leads to a mosquito problem every spring, particularly in CIRS and the Majlis. The courtyards outside both of these areas suffer from over-watering.



Figure 16: Tree in the Dean's Courtyard

Reduce Waste & Streamline current waste and recycling program

The data collection exercise to create the sustainability scorecard showed surprising trends in waste and recycling. Further investigation showed that the recording of the waste is inconsistent, the Cleaning Supervisor's records do not match Qatar Foundation's records, and there are days when certain recyclable materials are not being collected by the cleaners. The day shift supervisor suspects that sometimes the night shift cleaners mix the trash instead of keeping the waste segregated.

Re-train cleaners and cleaning supervisor to ensure that the recycling items are recycled and not re-mixed with general waste.

The Auxiliary Services Supervisor will integrate recycling education and process into the regular tool box talks. Additionally, she will work with the HELP team to include sustainability topics into the HELP curriculum.

Complete a full audit of the recycling trail from recycling bin to factory.

The Auxiliary Services Supervisor should conduct a full recycling audit, observing the process completely from start to finish. She needs to watch the cleaners empty the bin, see if the recycling goes to the large bin outside, how it is measured, then follow the truck to see if the truck is emptied properly into the segregated sections at the Lot 2 Waste Yard. She also should follow the truck from the Lot 2 Waste Yard to the final recycling vendor to



confirm that all materials are accepted.



Figure 17: Lot 2 Waste Yard

Continued interaction with Qatar Foundation and the recycling companies.

It is important to maintain a positive relationship with Qatar Foundation General Services. QF has recently created the position of Waste Management Coordinator who oversees the non-food waste stream. Regularly interaction with this person is important, because Qatar Foundation has a history of changing the recycling process without informing GUQ. For example, Qatar Foundation has begun to use an additional Plastic Recycling company, Gulf Plastics, because sometimes, but not always, Doha Plastic will not accept plastic bottles, which make up the majority of the plastic recycling. QF did not inform GUQ of either of these changes. To date, Georgetown has not seen the Gulf Plastics facility to have confidence in what that company is doing with the plastic waste. GUQ must schedule a visit to see their local operation.

Qatar Foundation is also considering to start work with Global Metals, a company that will accept plastic bottles, along with other recyclable materials. If QF progresses with that company, a GUQ representative should visit the local plant.

Annual Office Check for recycling Trays

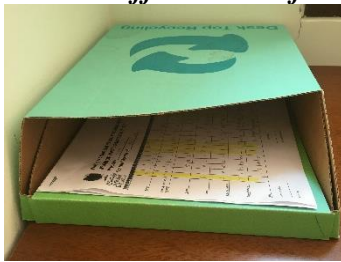


Figure 18: Paper Recycling Tray

GUQ offers paper recycling in every office, to make it as easy as possible to recycle. Over the years, as people have moved offices, combined offices, or rooms have been repurposed, some of the trays have disappeared. The Auxiliary Services Supervisor can arrange for an annual office check before the beginning of each fall semester to ensure that there is a paper recycling tray in every office.

Reduce Food Waste through Communication

When there are catered events scheduled in the building for 50 or more people, the Associate Director for Auxiliary Services alerts the cafeteria in advance to let Food Services know to expect a reduced number of patrons during the event. This is not incorporated into a Standard Operating Procedure and there is not a systematic method to ensure that the cafeteria is informed, so sometimes is unable to prepare. Also, in the past, there may have been multiple catered events at the same time, each with 20 -30 people, meaning that there was an impact on the food service, but there was no trigger to alert the cafeteria because each individual event was below the 50 person threshold. As part of the weekly review of upcoming events, the ADAS should review the impact on the cafeteria and provide the kitchen staff with a weekly update. This action can be integrated into the SOP.

New protocol for disposable plates and cutlery at events

The Events team has developed a new Standard Operating Procedure for dishes at lightly-catered events. In the past, most events used disposable plates and cutlery. Starting in Fall 2016, any event with 40 or fewer people expected will use reusable ceramic dishes and



metal cutlery. After the event, the Auxiliary Services Assistant will use the dishwasher to clean the dishes.

Lost and Found Books

On an ad-hoc basis, the Bookstore Supervisor has looked in the Lost and Found for textbooks that could be distributed to new students, particularly when shipments from the USA have been delayed. This behavior should be made routine. Before ordering the new books each semester, the Bookstore Supervisor should check the lost and found inventory and add non-obsolete, new-condition books to the Bookstore inventory.

Other Initiatives

Tire pressure checks to be included in new weekly fleet maintenance check

The Transportation Coordinator has implemented a weekly fleet maintenance check. As part of the check, the PickQuick maintenance team checks the tire pressure of each vehicle to ensure that the vehicles will operate with optimal safety and gasoline efficiency.

Leverage the Sustainability Resources and Expertise of Main Campus and Qatar Foundation

Improve coordination of Qatar efforts with Main Campus efforts

The Main campus in Washington, DC has greater resources than the Doha campus in faculty and staff capacity. There is a cross-functional monthly working group looking at ways to improve GU's sustainability. There is now an Office of Sustainability with two staff members coordinating sustainability efforts for Main Campus. GUQ needs to take advantage of the resources already available in the organization.

Monthly Working Group

Since the release of the Pope Francis' encyclical, *Laudato Si*, Georgetown University has held a monthly working group on environmental sustainability, led by the AVP of Operations, Christina Roberts. The Director of Sustainability, Audrey Stewart, has invited a person from GUQ to participate in those meetings virtually. The Associate Director for Auxiliary Services or CFITO can represent GUQ, sharing best practices and ideas with Main Campus. This will help GUQ to align initiatives with institutional sustainability goals. It may also provide avenues for GUQ to leverage main campus' scale and size of contracts.

Regular Communication with Office of Sustainability

In the past, Audrey Stewart and the Office of Sustainability on Main Campus have always been very supportive of initiatives in Qatar. The new Coordinator in the Office of Sustainability, Greg Miller, is a recent graduate of SFS and has natural ties to the School of Foreign Service in Qatar. Jill and Audrey have a good relationship – this relationship can and should grow with the new Associate Director for Auxiliary Services. Audrey would like to engage with Qatar and is happy to hold regular conversations outside of the monthly working group if it is helpful.

Link websites

Once the GUQ Sustainability website is running, the main campus Office of Sustainability would like to link to it and can promote work at GUQ.



Continue and Expand Work with Qatar Foundation

Qatar Foundation has greater resources and expertise than GUQ alone. GUQ needs to take advantage of its resources and to support the work it is doing in sustainability.

Qatar Foundation HSSE Department

QF has assigned Environmental Specialists to each building in Education City. Aisha Ghani is responsible for the GUQ building. She has agreed to arrange the water taste test in September and would like to engage with student groups if they are interested. She has attended some of their events in the past. GUQ has not fully pursued this resource, although many of the people on the QF HSSE team have valuable expertise. GUQ should improve this relationship for mutually beneficial results.

Facilities

Vijay Kamade is a new Waste Management Coordinator at Qatar Foundation. In the past, this was not a dedicated position. He is looking into alternative recycling vendors and looks forward to partnering with GUQ. Recycling companies are more interested in working with Qatar Foundation than Georgetown alone, because QF generates sufficient volume of recyclables to make a truck pick-up worthwhile.

Qatar Foundation Facilities will reap benefits from sustainability changes, as they save energy and reduce future maintenance costs. Continued engagement with the maintenance division will help GUQ achieve sustainability goals and save QF in labor costs. It will also benefit the Qatari government by reducing the use of subsidized utilities.

Student and Residential Life

Qatar Foundation Student and Residential Life, led by Jamil Karam, has historically been very supportive of sustainability and has acted as a promoter of GUQ initiatives. The Residential Life team manages the first LEED Platinum complexes in Education City and can prove to act as partners in future initiatives.

Publicize Works at GUQ

Sustainability Webpage

GUQ has engaged in considerable sustainability initiatives and research operationally and academically, but at the moment, there is no central website showcasing these operational, academic, organizational, or community sustainability achievements. The Office of Sustainability on Main Campus maintains a page with the President's message and links to important projects and progress. The GUQ Communications department is supportive of a similar GUQ Sustainability webpage on the condition that there will be new material added regularly and someone is dedicated to maintaining it. The communications department will help to design the page and create the initial links to the rest of the website, and then the new Associate Director for Auxiliary Services can maintain it. The webpage could be modeled after the Main Campus site.

Appendix 2 lists specific links to sustainability publications and press releases housed on other parts of the GUQ website that can be integrated into the central sustainability page.



Items to include in GUQ Sustainability Web Page:

Commitments:

- Pres. Degioia's Statement & GU Values
- Link to GU Sustainability site

Research & Education

- Published works
- Lectures & panels
- Working group information
- Research Grants

Campus Footprint:

- Bus
- Recycling
- Waste Reduction

Engagement:

- Internships
- Student Club
- Green Office

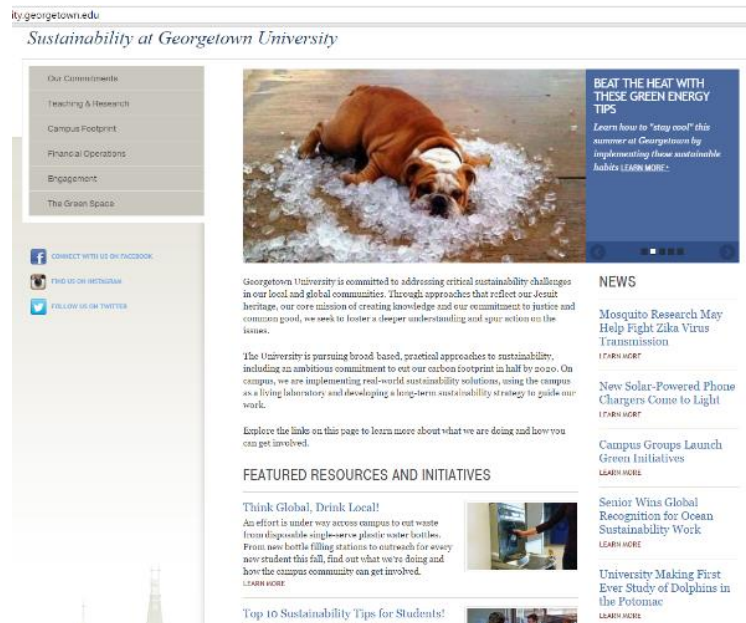


Figure 19: sustainability.georgetown.edu

Fostering Sustainable Behavior

Vision of Sustainability

The Office of Sustainability on Main Campus has created the following draft of its sustainability vision and goals. This is a broad vision that covers the entire university, and is applicable to the Qatar campus.

Georgetown University: Sustainability Vision and Goals

Georgetown plays a leading role in addressing critical sustainability challenges through its academic mission, physical footprint and financial operations. The University takes an integrated and holistic approach to sustainability, placing value on a “quadruple” bottom line: *people, planet, prosperity, and purpose*, guided by our Catholic and Jesuit values and our commitment to the common good.

Inspired by Pope Francis’s encyclical *Laudato Si* as guidance, we are called as a Catholic and Jesuit university to address the urgent moral challenge to protect our common home, bringing to bear the intellectual and spiritual resources upon which our community is built.

Our vision is of harnessing the incredible talents of our university community in service to one another and to the environment, to do net good and have a positive impact on the world through our sustainability work.

Through the work of the University’s internal Sustainability Working Group, along with leadership of the Georgetown University Student Association (GUSA), Georgetown is developing an intentional, stakeholder-informed set of aspirational, University-wide goals in key sustainability functional areas, including operations, research and education, engagement, investment, and governance and capacity. These



emerging goals, which inform our ongoing work, include:

Campus Operations

- *Increase renewable energy and go beyond “carbon neutral”*
- *Adopt circular economy and sustainability principles to guide material use cycles*
- *Become self-sustaining in water*
- *Demonstrate sustainability solutions on campus*

Research & Education

- *Increase educational opportunities in sustainability*
- *Expand the role of GU research in helping to solve critical sustainability challenges*

Engagement

- *Empower all Hoyas to lead in caring for our Common Home*
- *Advance sustainability through partnerships*
- *Lead local, national and global dialogue on sustainability*

Investments

- *Model leadership in sustainable investing*

Governance & Capacity

- *Create and maintain the structures and capacity to achieve GU’s vision for leadership (Stewart, 2016)*

Leadership’s role and recommended actions to engage the staff

The GUQ leadership is aware of environmental sustainability issues and is engaged in academic discussions and operational initiatives to improve GUQ’s environmental footprint. The Dean mentioned the threat of climate change in the New Student Convocation. The Chief Operating Officer has been supportive of past environmental initiatives including the Employee Shuttle system and has suggested additional methods to improve sustainability. The leadership can continue its engagement and lead by example by participating in initiatives.

The president of the university has made a strong statement to improve Georgetown’s sustainability. The local leadership team can bring this language to Qatar. The leadership can participate in the Green Office program and encourage staff to participate. The dean can recognize Green Office participant and sustainability achievements in Town Halls when appropriate.

Communication and Marketing

Communication about sustainability is vital to achieve success with the Sustainability Action Plan. It is important to have both formal and informal communication, digital and printed materials.

The Communications department has expertise in print and digital communications. It has already designed material for the Green Office program, as well as decals for recycling bins. It directed the video for the Ford Conservation grant. The communications team will ensure that the sustainability materials are attractive and professional. The department will



help to set up the qatar.sfs.georgetown.edu/sustainability webpage and when appropriate, can broadcast sustainability successes on social media.

The Bookstore window displays, the brown wall in the atrium, easels near the red columns, and the walls in the EPS offer visible spaces to communicate sustainability messages to the internal audience. Once Communications launches digital signage, this may prove to be another effective communication vehicle.

While official Georgetown communications and marketing are helpful in engaging students, the most successful method to reach the students is through other students. They listen to each other, and they support initiatives that their friends have created. It is important to work with the student club leaders to get them thinking about how sustainability can be incorporated into their groups and then support the implementation of their ideas. It is also important to work closely with the Green Club, and support and encourage the club’s ideas. Similarly, a future Green Team would stimulate the same internal promotion within the staff and faculty.

Organizational structure in support of Sustainability

During the GUQ reorganization this year, language about sustainability was added to the job description of the Associate Director for Auxiliary Services. Now that the Auxiliary Services team is fully staffed, and the ASAD will not need to be involved with the Events specifics, she will have time to work on sustainability. The new ASAD can be the driver of sustainability at GUQ, under the guidance of the Chief Facilities and IT Officer. If a Green Team develops in the future, the ASAD will lead this team. Similarly, she will act as an advisor to the student sustainability club. The ASAD can actively engage with the Main Campus Office of Sustainability and QF HSSE to take advantage of their expertise and programs.

Performance Metrics & Reporting

With a monthly or quarterly sustainability scorecard, such as the sample in figure 7, GUQ will be able to better achieve operational excellence. The scorecard will help to measure the success of the initiatives proposed in this plan. The following key performance indicators would signal success of the Sustainability Action Plan.

KPI	Annual Goal	Measurement
% Reduction in Electricity Use	2%	Annual kWh used
% Reduction in Chilled Water	2%	Annual ton-hrs used
% Reduction in General Waste	10%	Weights gathered by Al Mukhtar
% Increase in Shuttle Riders	5%	Number of riders as recorded by drivers
Participation Rate in Green Office	50 of 150 employees	Number of people who sign up
GUQ participation in monthly GU Sustainability Working Group	A GUQ representative at 80% of meetings	attendance

Figure 20: Key Performance Indicators



Recommendations: Future initiatives

In addition to the initiatives listed earlier in the Sustainability Action Plan, the following initiatives could be considered in the future.

Green Team

After the Green Office program roll out, people who participate can be targeted to participate on a Green Team. The Team could include students, or just faculty and staff. The idea is to bring volunteers together on a regular basis to discuss sustainability topics and brainstorm how to improve sustainability at GUQ. These Green Team members become sustainability champions who urge others in their departments to consider the environment at work and in their daily lives.

Community Class on Sustainability

To help share sustainability knowledge with a larger segment of Doha, GUQ can add a sustainability class to the Community Class schedule. Appendix 6 provides a list of potential local instructors.

Continue to look for new recycling opportunities in Doha

GUQ should continue to pursue new avenues for recycling products, particularly Glass and e-waste items. GUQ can also work with the compound landlords to introduce or expand recycling in employee housing.

E-books

Compared to physical books, e-books save paper resources and Green House Gas emissions from shipping. They save labor by reducing the number of titles that must be tracked and can be delayed from the publisher, the Main Campus Bookstore, or the Ministry of Culture.

E-books save money over physical books in a number of ways. E-books generally have a lower retail price than physical books. They do not require additional shipping costs. The Bookstore can buy e-books for the exact number of students who come to the store to pick up their materials, whereas the it must purchase physical books for the maximum possible enrollment for a class, because of the lead time required for the books to arrive in Doha. This practice wastes money and adds to obsolete inventory.

Buy-Back/ Resell Book Scheme

Currently GUQ only buys new books for classes. Students pay a flat fee of \$1000 per year for books regardless of their class schedule. A program that would allow students to sell their used books to other students in the following year would reduce costs to students, reduce GUQ shipping costs, and allow some books to be reused. There are challenges associated with this idea including the lead time to purchase books from Main Campus, frequent edition changes, and changing class schedules, but students have expressed interest in the concept and it could be pursued in the future. The scheme could also include used-condition books from the lost and found.

Mini Community Garden and Compost area

Given the weather, a garden would be limited, but it could provide students, faculty, and staff with a chance to enjoy the outdoors and to work together. Initial compost would be limited to coffee grinds and items that could go directly on the soil.



Procure Recycled Paper

In the past, GUQ was unable to purchase recycled paper because of a contractual obligation with Xerox to use their brand paper in the leased photocopiers. GUQ was unable to procure Xerox-branded recycled paper in Qatar. The new central printing and photocopying solution does not require a specific brand of paper, so it is possible to use high-quality recycled paper as long as it works well in the machines. Jarir Bookstore offers recycled paper, but the FIT team tested it, and it caused jams in the photocopiers. The Auxiliary Services Supervisor will continue to investigate new vendors and brands for recycled paper. A few years ago, GUQ attempted to import a container of Xerox brand recycled paper with the other schools in Education City. At the time, the cost was comparable to the regular locally purchased paper. It is possible that a similar solution could work in the future once a suitable paper is identified.

Recycle Toner

The IT team is inquiring to see if the Ricoh toner cartridges can be recycled locally. To date, GUQ has been unable to recycle HP or Xerox printer cartridges in Qatar. Ricoh USA supports recycling of its components, so it is possible that the local Ricoh team will also support recycling.

Plastic Water Bottle Ban in the Cafeteria

In the dormitories, QF Food Services agreed not to sell single-use water bottles. Since it has been achieved there, it is not impossible to eliminate water bottles from the cafeteria at GUQ. There is a water cooler in the cafeteria providing free bottled water. Perhaps the coffee shop and vending machines could continue to sell the water bottles in case someone wants to buy them, but by removing them from the line in the cafeteria, it will dissuade customers from getting a single use bottle. There is a concern though, that the customers would then substitute the water bottle for a soda bottle, which is equally damaging to the environment, and less healthy.

Stickers for toilets

The GUQ building has dual-flush toilets that provide an option to use more or less water depending on need. With help from the Communications team, FIT can design a clear removable decal that can be placed on the flush buttons to inform bathroom users which button to push to encourage only using the larger volume or water when necessary.

Food Waste Solutions

The food services provider offers a la carte breakfast, buffet and a la carte lunch, plus snacks in the afternoon Sunday to Thursday. The coffee shop offers pastries, sandwiches and drinks Sunday to Thursday. In June, the food contractor recorded 121.8 kilograms of Food Waste generated at the GUQ building. This does not include the food waste from catered events, which is not measured at all.

Meal Plan

GUQ can continue to work with QF Food Services and Student Services to establish a meal plan. If the dining halls throughout Qatar Foundation had a guaranteed number of sales, they could better estimate the quantity of food to provide. A meal plan would also help the contractor reduce costs and possibly improve quality. It could help students when budgeting and it would provide a figure for Qatar Foundation to include when calculating Financial Aid.



Food for Contractors

At the same time that GUQ has a large amount of food waste, we have contractors working in the building who complain about the quality or lack of food provided by their employers. We know that in the past, some of these contractors have had health issues related to the lack of nutrition from their food.

GUQ can try to work with QF Food Services to develop a way to discount the remaining food at the end of each day, so that it can be sold affordably to the hungry contractors.

Roadmap: Steps to Implement the Sustainability Action Plan

Step	Date	Responsible	Category
Start weekly Tire Pressure checks	July	Rahman	Maintenance/ GHG Reduction
Events Plate SOP & Implementation	August	Tala	Waste Reduction
Install Plug Timers	August 30	Roel	Electricity Savings
Launch Green Office Initiative	August 21-26	Jill	Green Office
Baseline Data Cleaned and Determined for KPIs	August 31	Jill, Roel	Scorecard
Create design for Website. Put together drafts	August 16-31	Jill, Waleed, Nick	Sustainability Website
Events Weekly Lunch Impact Review – SOP and communication to new ADAS	August 31	Jill	Waste
1st Green Office monthly poster & email	September 1	Jill content & email, Kate design poster	Green Office
Field Trip 1: Passive House	Late September	Jill working with Alex Amato to set-up, executed by Lori	Field Trip
Provide Door Gap survey to QF	September	Tushkeer	Maintenance/ GHG Reduction
Provide Over-Watering survey to QF	September	Tushkeer	Maintenance/ GHG Reduction
2nd Green Office monthly poster & email	October 1	Jill content & email draft. To be sent by FIT, Kate design poster	Green Office
Water Taste Test	1 st Semester	Lori to follow up with Aisha Ghani	Engagement & Education
Multi-Functional Printer	November	Nadim, Andre	Electricity Savings
3rd Green Office monthly poster & email	November 1	Jill content & email draft to be sent by FIT, Kate design poster	Green Office



4th Green Office monthly poster & email	January 10	Suzanne email (Kate design poster)	Green Office
Field Trip	2 nd Semester	Suzanne	Field Trip
Sustainability Website Launch	2 nd Semester	Suzanne	Launch Web Site
5th Green Office monthly poster & email	February 1	Suzanne email (Kate design poster)	Green Office
6th Green Office monthly poster & email	March 1	Suzanne email (Kate design poster)	Green Office
7th Green Office monthly poster & email	April 1	Suzanne email (Kate design poster)	Green Office
Assess Success of Green Office. Consider revisions for next year. Consider establishing “Green Team” Consider creation of community Class	June	Clare & Suzanne	Green Office Green Team Engagement
Integrate Sustainability into Student Leadership Certificate	Sept 2017	Jill/ Suzanne & Sandy	Engagement



Conclusion

Georgetown University in Qatar is recognized as a leader in sustainability in Doha. It has engaged in sustainability research and has created successful operational initiatives that have spread to other universities and schools in the area. There is still room for progress. This Sustainability Action Plan can serve as a guide to connect the varied initiatives into a comprehensive strategy and to lead GUQ to continue and improve its sustainability efforts.









Appendices

Appendix 1: Possible Field Trips

<p>Roof of GUQ building to see PV</p> <p>Contact: GUQ FIT Department</p>	 <p>https://scontent.fph11-1.fna.fbcdn.net/t31.0-8/328633_10151131641491630_1981097902_o.jpg</p>
<p>Tour of Sustainable elements of the dorms (LEED Platinum)</p> <p>Contact: Khalid Al Menhali Residence Life Specialist Khalid.Al-Menhali@hbku.edu.qa Tel: +974 44540369 Mobile: +974 55810827</p>	 <p>https://www.qewc.com/qewc/en/index.php/qewc/gallery</p>
<p>Ras Abu Fontas Desalination Plant</p> <p>Contact: welcome@qewc.com +974 44858 585 Or Riad Othman Al-Talatini Environmental Specialist relalatini@qewc.com +974-4464-8362</p>	 <p>https://www.qewc.com/qewc/en/index.php/qewc/gallery</p>
<p>Karahma Energy Awareness Building (Expected Opening Fall 2016)</p>	 <p>http://inbusiness.ae/2016/06/22/kahramaa-awareness-park-to-open-in-qatar-this-fall/</p>



<p>Mangroves</p> <p>Entalek Kayaking Al Thakira Nature Reserve entalek.org@gmail.com Steve (974-30233207)</p>	
<p>Al Wabra Animal Wildlife Preserve</p> <p>Mr. Jamal Ahmed Office Administrator Email: office@alwabra.com</p>	 <p>http://awwp.alwabra.com/?page_id=1362</p>
<p>Passive House Experiment Site</p> <p>Alexandre Amato Head of Sustainability, Qatar Green Building Council, Qatar Foundation, P.O. Box: 5825, Doha, Qatar. e-mail:- aamato@qf.org.qa tel:- (+974) 4454 0239 mobile:- (+974) 6688 6040</p>	 <p>http://www.bionest-tech.com/ME-en/news/908/qatar-builds-first-ultralow-energy-villa.html</p>
<p>Al Suwaidi Paper Factory</p> <p>Mohamed Sajahan Administration & Waste Paper Collection +974-6650-2094</p>	
<p>Doha Plastic</p> <p>Eng. Shaker Abbas Al Ansari General Manager +974-4411-4001 sharealansari@dohaplastic.com www.dohaplastic.com</p>	
<p>Lucky Metal</p> <p>Salman Shaban Manager-Commercial salman@luckygroup.com +974-4411-5311 www.luckystaralloys.com</p>	 <p>http://www.luckygroup.com/luckystaralloys/</p>



<p>Al Hodaifi Recycling (Tires)</p> <p>Brian Murphy murphy@alhodaifi-recycling.com www.alhodaifi-recycling.com info@alhodaifi-recycling.com +974 5523 2948 +974 4469 7192</p>	 <p>http://www.alhodaifi-recycling.com/</p>
<p>Raetex Industries (Rubber Recycling)</p> <p>Shayan Barmand Raetex Qatar +974-4462-0935 shayanbarmand@raetexindustries.com www.raetexindustries.com 974 4020 6088</p>	 <p>http://raetexindustries.com/</p>
<p>Global Water Sustainability Center, Visitor Center</p> <p>GWSC@conocophillips.com +974 4409 4701</p>	 <p>http://globalwsc.conocophillips.com/what-we-do/visitor-center/Pages/default.aspx</p>
<p>Global Metals +974 3331 6990</p>	 <p>https://www.facebook.com/GlobalMetals/</p>



Appendix 2: Items to include on the Sustainability Webpage

ACADEMIC

Books (CIRS)

[Babar, Zahra, and Suzi Mirgani, eds. *Food Security in the Middle East*. New York: Oxford University Press/Hurst, 2014](#)

[Luomi, Mari. *The Gulf Monarchies and Climate Change: Abu Dhabi and Qatar in an Era of Natural Unsustainability*. New York: Oxford University Press/Hurst, 2012](#)

Verhoeven, Harry. *Water, Civilisation and Power in Sudan: The Political Economy of Military-Islamist State Building*

Book Chapters

The Basic Guarantee of the Goals of Equality, Efficiency, and Environmentalism
Authors: Karl Widerquist; Michael Lewis; Philip Lawn

Occasional Papers (CIRS)

[Qatar's Natural Sustainability: Plans, Perceptions, and Pitfalls](#) (Mari Luomi)

[Conservation in Qatar: Impacts of Increasing Industrialization](#) (Renee Richer)

Water, State Power, and Tribal Politics in the GCC (Laurent Lambert)

Panels (CIRS)

[Environmental Degradation and Conservation: Challenges and Prospects](#), 12 November 2007
[Water, Energy, and Climate Change in the Gulf](#)

Lectures

[Sustainable Development for Economies and Corporations](#) Dr. Seetharaman (video, CIRS)

[GreenGulf Shares their Commitment to Renewable Energy with Georgetown Energy Students](#)

[Environment and Human Insecurity in the Middle East](#), Jeannie Sowers (video, CIRS) Sept 29, 2015

[A Hunger for Trees: Myths of Desecration in Nature](#), (Victoria Pedrick, CIRS)

[The Future of Nile Cooperation](#), Bart Hilhorst, March 25, 2015

[How the Arab World Can Benefit from Low Oil Prices](#), Shantayanan Devarajan March 24, 2016

[Explaining Trends in Energy and Pollution](#), James Markusen, February 24, 2016

[A Community Hygiene Output-Based Aid Program for Vietnam](#), Dan Westbrook, October 6, 2015

[Gas and Alternative Fuels: Present and Future Shares and Challenges](#)

Working Groups & Summary Reports (CIRS)

Food and Food Sovereignty in the Middle East

GCC States' Land Investments Abroad: The Case of Ethiopia

GCC States' Land Investments Abroad: The Case of Cambodia

Water, Energy, and Climate Change in the Gulf

Mobility, Displacement and Forced Migration in the Middle East



[Geopolitics of Natural Resources in the Middle East](#) (Research Initiative)
[Geopolitics of Natural Resources in the Middle East Working Group I](#)
[Geopolitics of Natural Resources in the Middle East Working Group Meeting II](#)

Articles

[“Environmental Sustainability in Qatar's Education City: Strategies, initiatives and education”](#)(Mari Loumi, John Crist, Bushra Alam, Muhammad Bilal Shakir)

Programs

[Safeguarding Food and Environment in Qatar \(SAFE-Q\)](#)

Student Research

[Environmental Sustainability in Education City: Green Beacon or Green Island?](#) - Awarded Outstanding Research Project UREP

OPERATIONAL:

Employee Shuttle
Recycling Program: Paper, Plastic, Metal, Batteries
Waste Reduction: Water Bottles & Paper
Solar Panels
Green Office
GHG Reduction from 2014 to 2015

Awards

Ford Middle East Conservation Grant
[2012 QF Sustainability Education award for Best Performance by a Department](#)

News articles

Spotlight on Sustainability in Sports at Josoor Institute
Georgetown Recycles and Contributes to Instilling a Culture of Sustainability in Qatar

OTHER:

Summer Internships

[Georgetown Student Explores Internship Opportunities in African Agribusiness](#)
[Gulf Encyclopedia for Sustainable Urbanism](#)

Other

[France 24 Environment – Qatar : making the desert bloom](#) (Zahra Babar)
[Plant a Tree for Life](#)
[Spotlight on Sustainability in Sports at Josoor Institute](#)

Student Clubs

Sustainability Club



Appendix 3: Printer Energy Use

	Active	Ready/ Standby	Low Power	Sleep
HP Laserjet P2050 Printer (desktop)	570 watts	8 watts	n/a	8 watts
Xerox Work Centre 3220	450 watts	60 watts	12 watts	n/a
HP Color Laser Jet CP6015xh	1200 watts	208 watts	n/a	19.4 watts
Xerox Work Centre 7855	862 watts	121 watts	94.6 watts	4.8 watts
Ricoh C4503	1850 watts	110 W	69.4 watts	0.69 watts

(HP 2008, 2011, Xerox 2015, 2016, Ricoh 2013)



Appendix 4: Identified Opportunities & Risks

Opportunities

- Cost savings, Resource savings
- Positive benefits for public image
- Partnering with the main campus Office of Sustainability
- Potential funding opportunities
- MENA/ Gulf recognition and awards

Risks

- No one truly “owns” sustainability at GUQ, implementation challenge
- Who will drive the implementation when Jill leaves Qatar?
- Community frustration from sustainability inconveniences
- People do not believe that the recycling is actually being recycled – there is a common misconception that the cleaners mix it and it all goes to landfill



Appendix 5: Key Stakeholders

- Dean – James Reardon-Anderson
- Chief Operating Officer – Amol Dani
- Chief Facilities and Information Technology Officer – Clare Wait
- Chief Communications Officer- Moamer Qazafi
- Associate Dean for Students – Brendan Hill
- Associate Director for Auxiliary Services- Jill McSorley, Suzanne Dixon
- Associate Director for Building Operations, Safety & Security – Tuskheer Abid
- Director of Sustainability (Main Campus)- Audrey Stewart

Additional Stakeholders

- Associate Director for Marketing
- Assistant Director of Risk and Compliance – William Hopkirk
- Assistant Director for Leadership Development – Sandy Kim
- Graphic Designer – Kate Kimble
- Georgetown Students
 - Sustainability Club
 - Student Government Association
- Qatar Foundation
 - HSSE
 - Facilities & Community Services
 - Capital Projects
- Contractors
 - PickQuick Transportation
 - Dnata
 - DHL



Appendix 6: Local Experts for Student Leadership Workshop or Community Classes

- [Katrin Scholz-Barth](#)
 - Katrin is an expert in Green Roofs who has taught at Harvard University and University of Pennsylvania. She is the former president of [Sustainable Qatar](#).
 - In addition to Katrin's expertise in sustainability, she is a long-time member of the Georgetown and GU-Q community with a history of volunteering to help increase the community's environmental knowledge. At GU-Q, she gave a presentation on sustainable desert gardening techniques to employee families and engaged their children in building a worm hotel composting station.
- Alex Amato, Head of Sustainability, [Qatar Green Building Council](#)
- [Amina Ahmadi](#), Director Technical Affairs, Qatar Foundation
- Researchers from [Qatar Energy and Environment Research Institute \(QEERI\)](#)
- Professors from [HBKU Sustainable Energy and Sustainable Environment Programs](#)
- Professors from [Qatar University Environmental Science Center](#)
- Consultants from [Richer Environments](#), a local Environmental consultancy.



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