

HKUST Sustainable Office Standards & Guidelines

STANDARDS AND GUIDANCE FOR STAFF AND FACULTY TO IMPROVE OFFICE SUSTAINABILITY PERFORMANCE

Effective Date: May 2016
Reviewed Date: August 2023



Developed by the Sustainable Operations Executive Committee

GREEN.UST.HK | GREEN@UST.HK

HKUST Sustainable Office Standards & Guidelines

The Hong Kong University of Science and Technology (HKUST) is a leader in the Hong Kong community and strives to be a leader in sustainability as well. HKUST's commitment to this idea is articulated in the following sustainability mission statement:

HKUST will become a global leader in sustainability education by transforming the Clear Water Bay campus into a carbon-neutral, zero waste, and net-positive environmental impact living laboratory for experiential learning, demonstrating cutting-edge research and sustainable operations within a vibrant and engaged community.

Based on the premise that many small actions lead to big changes, this document provide a clear set of Standards and Guidelines for improving the sustainable operations offices on campus.

How to Use these Standards & Guidelines

These Sustainable Office Standards and Guidelines are intended to provide simple, yet meaningful rules and direction for individuals and teams at HKUST to improve the sustainable performance of their spheres of influence on campus.

These standards and guidelines were developed and approved by the Sustainable Operations Executive Committee (ExCo) with the understanding that they are flexible enough to adapt to changing conditions and constructive feedback. Please provide comments and suggestions to green@ust.hk so the guidelines can improve and grow with our HKUST community.



HKUST Sustainable Office Standards & Guidelines

Contents

- 1. The Sustainability Network Representative (SNR)
- 2. Sustainability-Driven Human Capital
- 3. Sustainable Sourcing and Use of Materials
- 4. Sustainable Communications and Outreach
- 5. Sustainable Work Spaces
- 6. Sustainable Meetings and Events
- 7. Sustainable Student Support
- 8. Sustainable Renovations
- 9. Sustainability Monitoring

1. The Sustainability Network Representative (SNR)

The **Sustainability Network Representative (SNR)** is the central point of contact on sustainability issues for the office.

All offices are required to appoint one person to assume the role of Sustainability Network Representative.

The responsibilities of the SNR are:

- To become familiar with the details of the HKUST Sustainable Office Guidelines and to present this
 information to office colleagues.
- To inform new members of the office/department, including faculty, staff and students, of the guidelines and how they are implemented within the office.
- To advance any interesting or relevant information to their colleagues and office-mates, and can serve as a resource to their colleagues if there are questions about HKUST sustainability goals, objectives, or actions.
- To attend quarterly meetings and contribute advice and feedback to other members.

The responsibility for coordinating the SNRs, facilitating meetings, and answering questions is the Sustainability Unit. green@ust.hk



People are HKUST's most important resource. Making sure that all members of the HKUST community are healthy, safe, and nurturing work environment is a key to supporting sustainability-minded faculty, staff, and students who can perform at a high level.

The following actions are encouraged to develop our human resources in ways that reinforce sustainability goals.

- Include in the University's statement of values the importance the University attaches to sustainable actions within the workplace.
- Include sustainability modules within the new employee orientation events.
- Consider including sustainability practices for performance evaluations so that employees recognize that reducing environmental impacts and conserving natural resources is an element of the job function.
- Encourage staff to join the HKUST Green Team. Volunteers for the Green Team meet monthly over lunchtime (lunch is included!) to discuss areas of interest on campus and how this network of Team members can share ideas and improve campus conditions.

Any questions relating to developing sustainability-driven human capital can be directed to the Human Resources Office c/o Ms Vivian Lam, Human Resources Manager (e-mail: hrvivian@ust.hk)

3. Sustainable Sourcing and Use of Materials

The sourcing of services and materials on campus—in ethical and sustainable ways—are key areas where sustainable offices can make a difference. The following standards and guidelines are intended to prioritize the ethical sourcing and minimization of wastes through specification in contracts:

All offices must adhere to HKUST's Living Wage Policy which extends to contractors when sourcing services. This wage is higher than the government's statutory minimum and ensures a sustainable and reasonable level of life based on family size and geography for individuals employed in service of the university. Further Operational Guidelines on Sustainable Purchasing can be found on the Purchasing Office website.

All offices are required to procure 100% recycled or FSC certified paper for office printing. Offices and their suppliers are prohibited from the use of plastic, single-use bottled beverages at meetings and events. Since 2017, HKUST has maintained a ban on the sale and distribution of plastic disposable onetime use bottled water on campus.



When working with suppliers, offices should seek to adopt the following actions:

- 1. Purchase from suppliers in bulk to reduce packaging and minimize the use of plastic.
- 2. Choose suppliers that provide environmentally friendly office supplies such as refillable pens, biodegradable garbage bags, ethically sourced eco-friendly souvenirs.
- 3. Reduce printing as much as possible by utilizing electronic resources for filing, forms, communications, and other documentation (see "Print Tips" at green.ust.hk for more ideas).
- 4. Ensure that all business cards are printed with recycled content, FSC certified and using soy-based ink printing.
- 5. Purchase appliances with Energy Efficiency Label Grade One, and water appliances that achieve "Water Sense" conservation levels.
- 6. Before buying large items (like new furniture) contact the Purchasing Office to check our green purchasing policies.

Any questions relating to the sustainable use of materials can be directed to Mr Alan Ng in the Purchasing Office at <u>pualanng@ust.hk</u>

4. Sustainable Communications and Outreach

Communicating with colleagues, peers, and students can often place undue burdens on our consumption and waste streams. The goal of these standards and guidelines is to facilitate less impact from communications strategies in terms of printing, publishing, displays, handouts, and inter-office communications.

Offices are encouraged to adopt the following actions:

- If printing large banners, utilize the water-resistant heavy paper option from PTC as cheaper and recyclable alterative to vinyl banners.
- Consult the Sustainable Printing guide from PTC for tips and suggestions on how to utilize digital printing, reduce wasteful over-runs, and manage supplies in the most sustainable ways.
- Publish newsletter and promotional materials in e-format to minimize hard copies.
- Send and use e-copies of minutes and agendas for meetings, and utilize document sharing software to reduce the need for printed copies for editing and notes.
- Eliminate the practice of printing emails and remove all inkjet printers as they are more expensive, consume more energy, and require more ink cartridges over time than laser alternatives.

Any questions relating to the sustainable strategies for communications and outreach can be directed to Mr. Kenny Fong in MTPC: ptkenny@ust.hk



The office workspace is where most of us spent the majority of our time, so it is essential that we set up these spaces in ways that contribute to our ability to use the spaces in the most efficient ways possible. Offices are encouraged to adopt the following actions:

Energy Efficiency

- Coordinate with CMO to target areas that do not require cooling during off-hours so that they can be scheduled as such, and share feedback on the temperature control.
- Set up strategies for reducing light levels when natural lighting is available, such as using task lighting, window shading, and placement of desks in ways that maximize the utilization of natural light.
- Switch off air conditioning after office hour or when staff leaves the room.
- Ensure that all non-essential devices are shut off or in standby mode at night and during weekends and holidays (copiers, printers, computers and other appliances).
- Use power strips with individual switches to switch off appliances when not in use.
- Enable sleep mode on all copiers and printers after 5 minutes or more of inactivity; set all computers and screens to go into sleep mode after 10 minutes of being inactive or less. Avoid using screen savers, as they use much more energy than standby mode.
- Maintain average indoor air temperature between 24-26°C

Waste

- Establish convenient recycling collection locations with proper signage in the office and separate recyclable (paper, plastic, metal and glass) from general trash. Check periodically to ensure that diverted items are going into the appropriate containers.
- Install a pipe filtration water refilling system to eliminate the use of bottled water.

Any questions relating to creating sustainable workspaces can be directed to Mr Jerome Hon at the Facilities Management Office at <a href="mailto:eoign:eoig

6. Sustainable Meetings & Events

Conducting university business often requires face-to-face meetings, working meals, content-specific events, and even celebratory receptions. The way we facilitate these meetings and events can create good outcomes in terms of our impacts on waste management.

Offices are prohibited from the use of plastic, single-use bottled beverages at meetings and events. Since 2017, HKUST has maintained a ban on the sale and distribution of plastic disposable one-time use bottled water on campus.



For any events that involve food, please consult the Green Catering Guide to ensure that food waste is minimized and the appropriate facilities units are engaged to separate and remove recyclable items.

- 1. When ordering food from suppliers and caterers, require reusable cutlery, mugs and tableware to reduce disposable items. If disposables are necessary, please request biodegradable materials and ensure that CMO is able to collect the food waste and materials for appropriate recycling.
- 2. For suppliers, caterers, and offices, bottled water is prohibited on campus. Provide tap water or use bulk water dispensers with reusable cups and mugs.
- 3. Develop a plan for what to do with any left-over food, including the process for donating the food to charities like <u>Food Angel</u> or <u>Feeding Hong Kong</u>.
- 4. When promoting the event, utilize low-impact strategies (such as those in the Sustainable Communications and Outreach section), and consider bags and souvenirs that are reusable and practical to minimize waste.

Any questions relating to sustainable meetings and events can be directed to Mr Stanley Sit at the Campus Services Office at kstanley@ust.hk

7. Sustainable Student Support

At HKUST, students are our partners, our part-time workers, our Interns, our "eyes and ears" on the campus, and even our entertainment. It is critical that we make sure students are surrounded by positive examples of sustainable actions, and that they have the ability to participate. All offices that come into regular contact with students are encouraged to adopt the following actions:

- Include sustainability education in the orientation of new students.
- Encourage students to only print out course materials if needed.
- Educate students and societies about organizing sustainable events.
- Ask students to switch off the lights when they leave the classroom or dormitory.
- Engage students on energy saving, water conservation, reduce waste and support recycling on campus.
- Encourage students to bring and refill their own water bottle, and coffee mugs.

Any questions relating to sustainable student support can be directed to the Student Affairs Office at saray@ust.hk, tel: 23586658, Mr Raymond Tang, Manager, SAO.



This section provides directions for HKUST offices planning to undergo the fit-out process in order to facilitate the establishment of a more sustainable office environment in the context of office relocation. The emphasis is on maximizing energy efficiency, minimizing ecological footprint, enhancing productivity, and promoting wellbeing.

Energy Efficient Lighting

To enhance energy-efficiency and staff's comfort and wellbeing, the following lighting measures should be considered:

- Energy-efficient Lighting Control System
 - The office may employ technologies such as occupancy sensors, time scheduling, and dimming technology in their lighting system.
 - Adopt zone control to allow individuals to adjust their dimming levels, color temperature and/or on-off control when they are out of office.
- Circadian Lighting System
 - Enhance staffs' focus and personal health through using a lighting system that aligns with the human circadian rhythm by mimicking the color temperature and intensity of natural sunlight throughout the day.
 - Customized adjustment of the lighting is also available through a mobile application to further attune to staffs' needs.
 - o More information on LED Circadian may be accessed <u>here</u>.

Energy Efficient Temperature Controls

To reduce energy consumption and maintain a comfortable temperature and air circulation within the office, the following technologies should be considered:

- Energy Saving Ceiling Fans
 - Such fans may be used to increased ventilation rates and allow the cooling temperature of the space to be increased and/or the number of air-conditioning units to be turned off.
 - An example and demonstration of such fan in the HKUST Sustainability Office may be accessed <u>here</u>.
- Temperature-regulating Wall Paint
 - For walls with high solar heat gain, consider the use of thermal insulating paint on the inner side of external facing office wall surfaces to making it more comfortable for the occupants seated near warm / cold walls during peak summer / winter days.
 - An example and demonstration of such paint in the HKUST Sustainability Office may be accessed <u>here</u>.

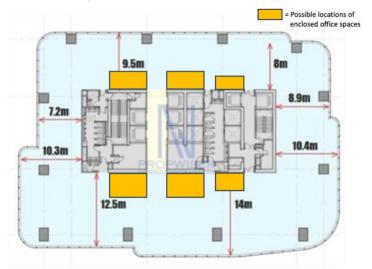


- Energy-saving Smart Windows and Solar Film
 - Windows equipped with smart switchable glass can provide both solar heat control and privacy when switched on.
 - o An example and demonstration of such glass may be accessed here.
 - Solar film may also be placed on windows with higher solar heat gain to improve thermal comfort of users seated near the windows.

Office Layout

The general rule of thumb is to adopt a hybrid layout design consisting of open layout workstations and flexible enclosed rooms. Additionally, natural sunlight in the office should be maximized and sightlines should be kept clear. To achieve this, the following should be considered:

- Open Layout Workstations
 - Large, singular design with minimal physical barriers.
 - o Resources are shared and available to all.
 - o Make use of green plants and furniture to define spaces instead of walls or tall partitions.
 - Make use of acoustic panels / baffles, carpeted floors, and soft furniture to reduce distractions from noise and reverberations.
- Flexible and Multi-purpose Enclosed Rooms
 - Reduce the provision of private enclosed rooms. Ensure that at least 70% of the department office is accessible to all office staff.
 - Place enclosed rooms along the interior walls of the office space, such as the following:



- To increase flexibility, fit large enclosed rooms with moveable wall partitions that could divide the room into smaller rooms.
- Make rooms available for both group and individual use on a "first-come, first-serve" basis to accommodate spontaneity, but can also be reserved through an online booking system to optimize efficient space usage.



• Windows and Partitions

- All windows and glass walls within the office should remain unobstructed. Should more
 privacy be needed during certain periods, venetian blinds and smart switchable glass may be
 installed, but usage should be kept to a minimum.
- Low desktop partitions (400mm 500mm in height) should be used to define individual workspaces. Noise-reducing partitions may also be used to enhance the acoustic environment.

Office Furniture & Equipment

When possible, existing furniture and equipment from the original office or other locations in the HKUST campus should be used to minimize waste and the cost of renovation. Rethink the need for purchase and ensure that this purchase will serve multi-purpose uses to extend the use phase of the product. Should this be insufficient, the following should be considered:

• Purchase Second-hand Furniture

- Usage of second-hand furniture is encouraged. For guidelines relating to the purchase of these objects, please refer to the <u>HKUST Second-Hand Goods Purchasing & Reimbursement</u> <u>Guidelines</u>.
- Purchase Environmentally Friendly Furniture and Equipment
 - o Furniture and equipment made from low environmental and waste materials and equipment using less energy and/or water should be considered. For example, wooden furniture made from FSC-certified wood (FSC 100 percent, FSC Recycled, or FSC Mixed), which ensures the wood is sustainably sourced. Consider the lifespan, resources required for manufacturing and transport, ongoing operation and maintenance cost, and end of life disposal. Please refer to the HKUST Operational Guidelines on Sustainable Purchasing and the HKUST Sustainable Purchasing Requirements For Suppliers and Contractors.

Staff Wellbeing

Apart from natural lighting, a comfortable temperature, and good acoustics, staffs' overall wellbeing can also be improved through the following means of office design:

Inclusions of Plants

- Plant troughs, potted plants, and moss walls are effective in reducing stress and improving
 the mental well-being of staff and visitors of the office. They may also be used for improving
 air quality, sound-proofing, and as partitions between workstations.
- Some plants requiring low-maintenance in the office environment and improving air quality such as Snake plant, Monstera, Peace Lily, and Fittonia.



- Designated Active Workstations
 - To encourage staff to adopt an active lifestyle and thus improve their overall wellbeing, include designated active workstations in the office such as through the use of standing desks equipped with walking pads and bicycle-desk hybrid workstation.
- Choice of Color in Office
 - Select colors that align with the team's needs, such as calming tones for a focused environment or vibrant shades for creative spaces, which creates a harmonious atmosphere that enhances collaboration and overall work satisfaction.

9. Sustainability Monitoring

It is HKUST policy to ensure full transparency of data and progress for all areas of the 2028 Sustainability Challenge, including all key performance indicators (KPIs) and other measurable items. The operational focus area of the HKUST 2028 Sustainability Challenge includes specific goals and targets on five priority areas:

- 1) Energy/GHG Emissions
- 2) Waste to the Landfill
- 3) Water Consumption
- 4) Landscape and Biodiversity
- 5) Community Wellbeing

These five priority areas are bound by HKUST's policy on transparency of sustainability data and include indicators that can measured so that the broader community can have access to the real data that indicates our progress and performance over time. The recent data for each of the indicators is posted on the Progress and Performance page of the Sustainability / Net-Zero Office website. The Sustainable Operations Executive Committee (OpCo) chaired by the Vice President for Administration and Business oversees the implementation of the progress and performance of this sustainability master plan and reviews and reports progress to the campus community.

