



QSNCC



ACT  
RESPONSIBLE,  
THINK  
SUSTAINABLE

# QSNCC Sustainability Guidelines





## QSNCC'S JOURNEY

1989

The Queen Sirikit National Convention Center (QSNCC) was established since 1989.

1991

QSNCC hosted the 46<sup>th</sup> Annual Meetings of the World Bank Group and the International Monetary Fund.

Over three decades, the QSNCC hosted over 22,000 domestic and international events, establishing Thailand as an Asian hub for international conferences and exhibitions. In addition, it is a leader in the country's MICE industry.

2019

QSNCC, Thailand's first national convention center, has been the country's largest and most comprehensive convention center in the city center. In the midst of a rapidly changing world and the changing scale of the event, the center took another significant step forward to maximize its potential. It decided to close its doors in 2019 for an extensive renovation.

2023

The revamped QSNCC has been positioned itself as "The Ultimate Inspiring World Class Event Platform for All" to support all kinds of event function without limitation. QSNCC is the first and only convention center in South East Asia that receive the **LEED NC v.4 Silver certification**. **LEED (Leadership in Energy and Environmental Design) is the world's most widely used green building rating system accredited by the U.S. Green Building Council**, the most prestigious green building grading system globally. The accreditation reaffirms our unwavering commitment to promoting and improving the quality of the environment and community for a better quality of life. Our main goal is to contribute the environmental sustainability.



# MINDFUL DESIGN for SUSTAINABILITY



## Sustainable Architecture

QSNCC was designed with sustainable architecture in mind to minimize the negative environmental impact.



### Reduce Energy Consumption

- QSNCC uses a heat-resistant glass façade to lower the heat transmission into the building.
- Calculate Overall Thermal Transfer Value (OTTV) and Roof Thermal Transfer Value (RTTV).
- Use high-performance Heating Ventilation and Air Conditioning (HVAC) systems.
- We only employ low Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP) refrigerants in HVAC systems.



### Reduce Urban Heat Island Effect

- Use light-colored pavement and roofs that have high solar reflectance to reduce heat absorption and lower the temperature in and around the building.



### Support Low-Impact Travel

- With a connection to mass transportation like the bus, the BTS, and the MRT, the QSNCC offers low-impact travel to/from the convention center.
- The MRT Blue Line National Convention Centre station (Exit 3). A tunnel connects the MRT Station to the venue.



### Connect to a Vast Green Space

- Connect to Benjakitti Park which has been transformed into a full-fledged urban park. The largest green space in Bangkok is designed as an ecological park for a sustainable environment.
- The Atrium Stairs in the building which connect the interior to the stunning green space outside seamlessly.



## Use Eco-Friendly Construction Materials

QSNCC pledged to green construction practices

- More than 75 % of construction waste is recycled.
- Efficiently divert construction waste from landfills.

Use eco-friendly construction materials

- More than 25 % of construction materials use materials with recycled content.

Use eco-friendly coating products

- Use low VOC for coatings, adhesives, sealants, paints, and ceiling tiles which are safe for the user and the environment.



## Innovation for Smart Buildings Management

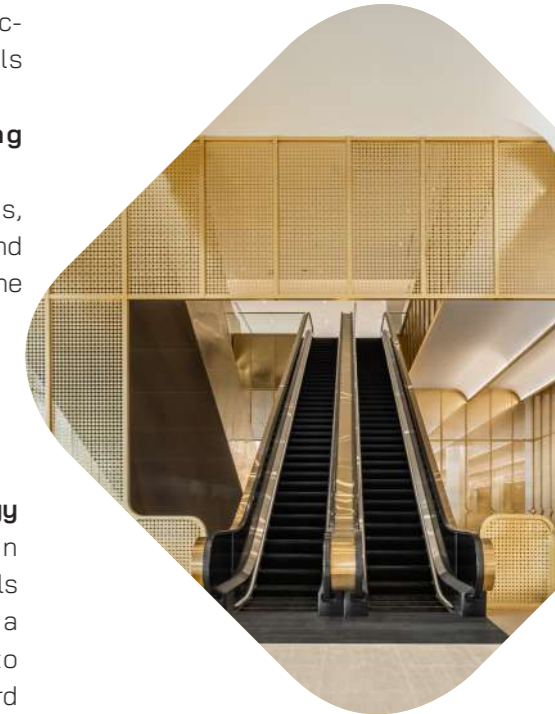
Use Building Automation System (BAS) and smart building control metering and monitoring to maintain resource efficiency.

- Install 5,400 square meters of solar panels on the rooftop to serve as a renewable energy source in the building.

- Install daylight sensor near the glass façade area to reduce energy consumption.

Utilize integrated technology to create fresh air supply in buildings. The QSNCC installs Outdoor Air Unit (OAU) and a high-efficient air purifier to maintain the air quality standard for the health of all occupants.

- Set up negative pressure for chemical storage to prevent potentially contaminated air or other dangerous particles from flowing outside into a non-contaminated area.



“QSNCC is committed to elevating and promoting the MICE industry to positively impact the economy, society, and environment.” We establish practical guidelines to promote sustainability across multiple dimensions. The new QSNCC uniquely operates the facilities, food and beverage service, and event services in an environmentally friendly manner. Procedures have been developed and communicated in various ways to involve all employees, clients, and guests in our sustainable practices.



QSNCC sustainability practices are as follows:



### Green Procurement

- Collaborate with business partners who are aware of sustainability and create a positive impact on the environment. We choose products with carbon reduction labels or green labels and refuse to use materials or products that are contaminated with chemicals.
- Support products and services from social enterprises to generate income distribution and strengthen the local economy.
- Treat our business partners fairly and ethically, without discrimination.

### Waste Management

QSNCC recognizes the importance of effective waste management and its contribution to climate change. We have established guidelines for our employees and clients while raising public awareness about waste segregation practices and at-source waste management to reduce waste to landfills. We implement sustainable waste management in the following ways:

#### Office Waste



- Provide staff with labeled and colored bins for different types of waste.
- Encourage waste sorting practices among employees for efficient waste management. We sort the waste into four types: organic waste, general waste, recycling waste, and hazardous waste.
- Collaborate with telecommunication service providers to provide drop-off facilities for electronics waste, including cell phones, batteries, and chargers, for proper e-waste disposal without posing major risks to the public and ecosystems.

#### Waste from Exhibition or Event



- Provide clearly labeled and colored bins throughout the event to encourage recycling.
- Decorations, furniture, and equipment are either eco-friendly or meant to be reconfigured and reused rather than being used once and then discarded. The remaining waste will be recycled as much as possible.

#### Food Waste from the Event and Retail Stores



- Install food waste composting machine to convert food waste into an organic substance. As a result, it can be used as an ingredient in animal feed and fertilizer instead of being thrown into landfills.
- Encourage the customers to share and donate food that would otherwise be wasted to nearby communities and food rescue foundation.



## Energy and Resource Conservation

QSNCC has been received the LEED NC v.4 Silver certification for its green building. The building was meticulously planned from design to completion to meet LEED certification requirements. Building architecture, landscape architecture, mechanical and electrical engineering, and other fields are concerned with energy conservation.

### Electricity

- Built in accordance with the climate-responsive architecture philosophy. To reduce heat transmission into the building, the west and south-facing areas have solid walls, while the north and east-facing facades use double-paned glass with a Low-E coating.
- Install Building Automation Systems (BAS) are installed to manage mechanical and electrical engineering systems and to monitor energy consumption.
- The solar panels which installed at the rooftop of the building as a renewable energy source that can cut the amount of electricity from external sources by roughly 3%.

- Install induction LED lighting throughout the building to reduce energy consumption by 40% compared to a reference building per the ASHRAE 90.1-2010 standard.
- Different lighting scenes in the lobby and retail hall are scheduled using automatic daylight responsive lighting control to maximize the use of natural light while reducing energy consumption. The innovative window glazing allows the view and natural light into the building.

### Water

- Install water-efficient fixtures that reduce water consumption by 45% compared to the LEED standard. We also monitor our water consumption to ensure efficient water management.

- Reduce the demand for water supply for its green spaces by recycling HVAC condensate water.
- Native plants and trees for our exterior landscaping and drip lines to maximize effectiveness and minimize water usage. Our green space use recycled water which means we reduce water usage in green space by 100%.

### Paper

- Encourage event organizers to use an electronic registration system and online marketing materials instead of paper.
- Set the printers and copiers to double-sided printing to reduce paper consumption.
- Collaborate with our partners to establish a paper recycling project by providing designated drop points near copiers and offices.

## Pollution Management

QSNCC is committed to reducing and eliminating pollutant emissions into the environment for the benefit of all visitors, society, and the surrounding communities. Our pollution-control plans are as follows:

### Water Pollution

- Install a wastewater treatment system and reuses greywater.
- Conduct and measure the effluent water quality in accordance with the law.
- Stipulate performed preventive maintenance on the water treatment machine and its associated equipment to avoid potential leaks and contamination of the environment.

### Light Pollution

- Minimize up-light and light trespass to limit the skyglow effect and disturbance to the surrounding area.
- A glass façade around the building allows natural light into the interior space. Aside from being aesthetically pleasing and lowering electricity and HVAC costs, the interplay of natural lights in an interior space creates a comfortable feeling, energizes a space, and promotes a healthy living environment for visitors and staffs.

### Air Pollution

- Install carbon dioxide sensors to measure the air quality in the venue.
- Have dust control mats at each entrance to capture dust particles carried on footwear and prevent them from polluting the indoor atmosphere.
- Install high-quality MERV13 air filters to trap airborne particles and keep indoor air clean.



## Green Meeting and Sustainable Exhibition Support

QSNCC offers a green meeting package for clients to consider and join environmental protection practices as follows:



### Support carbon-emission-reduction practices in the events such as:

- Use natural materials for decoration that are either eco-friendly or designed to be reconfigured and reused in accordance with circular economy practice.
- Keep the meeting room temperature at 25°C
- Switch from traditional paper registration to an electronic registration system.



### Encourage sustainable food and beverage service

- Create alternative food and beverage menus that include vegetarian, vegan, and plant-based options to reduce greenhouse gas emissions from transportation and livestock.
- Source and use local food ingredients to generate revenue for the community while lowering transportation-related carbon dioxide emissions.
- Choose food packaging made of eco-friendly materials or bio-circular products, instead of using plastic or styrofoam.



## TOWARDS SUSTAINABLE EXCELLENCE

Beyond the goal to be “The Ultimate Inspiring World Class Event Platform for All”, QSNCC is committed to being an industry leader in sustainability. We are also encourage economic growth with carefully designing and constructing infrastructure that provides superior products and services to meet a comprehensive range of event requirements.

QSNCC, a new landmark in Thailand, attracts business travelers from around the world. Promote sustainable economic growth while being mindful of our environmental impact. QSNCC is never stop striving to make cities and communities more inclusive, safe, resilient, and sustainable.

**“Together, Better for The World”**



QSNCC