

THE
SMARTER
BUILDING
NETWORK



The Smarter Building Network is a program developed by the Trinidad & Tobago Green Building Council to recognize and promote the use of green, sustainable practices in commercial spaces. The intent of this program is to reward organizations who demonstrate green stewardship. The Smarter Building Network is not to be confused with energy auditing, or comprehensive green building rating systems such as LEED®, but instead functions to build foundational awareness on environmental stewardship in building operations and maintenance in Trinidad & Tobago.

There are 4 sustainability categories which are achievable in Trinidad and Tobago:

Energy Efficiency

Water Efficiency

Recycling

Renewable Energy





Energy Efficiency

Overview

Trinidad and Tobago's energy use intensity is high in both residential and commercial applications. This can be primarily attributed to the country's subsidized energy cost, which makes energy efficiency return on investment (ROI) calculations ostensibly unattractive.

Subsidies are slowly being removed and thus the ROI will become more feasible. Energy in Trinidad is generated from fossil fuels which embody significant global warming potential resulting in climate change. Fossil fuels are a finite resource and therefore must be utilized wisely whilst alternative energy sources are developed.

The aim is to promote energy efficiency to reduce financial strain on both the customer and the State whilst reducing the country's carbon footprint.

Intent

To establish a baseline of energy efficiency performance and in turn reduce environmental and economic impacts associated with excessive energy use.

Methodology

Compare the annual energy use intensity (EUI) of the space to the set baseline performance annual EUI for a similar space.

Requirement

Option 1 – Measurement Path

Evaluate the energy use intensity (EUI) of the space using the following documentation

- Energy bills for the last 6 to 12 months for the facility
- Floor plans of the space
- Usage of space (including average number of occupants)
- Description and quantity of all equipment using energy within the space

Performance Calculation

Baseline EUI performance for commercial office space:

67.3 kBtu/ ft² per year (19.72 kWh/ ft² per year) or (212.26 kWh/ m² per year)

Recognition Award Criteria

Evaluated space must meet equal or be lower than the baseline EUI performance.





Water Efficiency

Overview

Trinidad and Tobago does not yet have a sufficiently mature culture of water conservation. Water is a precious commodity and delivered at high cost to the taxpayers of the country. The utility company operates inefficiently with regards to the production and distribution of potable water. End users are currently unaware of the true cost as potable water rates are subsidized and generally unmetered.

The aim is therefore to promote water efficiency. Simple, low or no cost strategies can significantly reduce potable water consumption.

Intent

To establish a baseline of water efficiency performance of fixtures and in turn reduce environmental and economic impacts associated with excessive water use.

Methodology

Evaluate performance of plumbing fixtures and activities which consume potable water.

Requirement

Option 1 – Prescriptive path

Provide specification or cut sheets on water fixtures, number of occupants and calculate the estimated water consumption. Compare total consumption against the baseline performance. Achieve 10% total water saving when compared to the baseline performance

Performance Calculation

Baseline Performance Values:

Water closet/ Toilet	1.6gpf
Urinals	1 gpf
Lavatory Faucet	0.5 gpm
Kitchen faucet	2.2 gpm
Showers	2.5 gpm

Recognition Award Criteria

Water performance must be 10% more efficient than baseline performance.





Recycling

Overview

Trinidad and Tobago's waste recycling/ reduction program has been in its infancy for the last decade. New recycling waste programs have recently been initiated, however not yet widespread.

The aim is to create the awareness of recycling and reduction of waste by acknowledging buildings which are sensitive to this issue.

Intent

To establish a recycling policy and divert recyclables away from the landfill.

Methodology

Provide dedicated areas for collection of recyclables and provide proof of collection/ deposit (receipts or photos).

Requirement

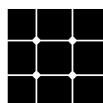
Implement a Recycling Policy

Provide recycle bins for aluminum cans, glass bottles, plastics, cardboard, paper; depending on the types of waste generated.

Provide collection receipts and or photos to confirm recycling is occurring.

Recognition Award Criteria

Meet the requirements.



Renewable Energy

Overview

Trinidad and Tobago is fully reliant on fossil fuels for the generation of power. Fossil fuel is a limited resource and contributes immensely to global warming. Trinidad and Tobago should ideally divert away from fossil fuel dependency and strive towards renewable energy generation.

Intent

To promote the use of renewable energy.

Methodology

Generate 400W of energy from renewable sources

Requirement

Option 1

Installation of permanent renewable energy generation devices on site to generate 400W.

Option 2

Installation of the following:

Solar water heater

Option 3

Purchase renewable energy attributes totaling 100MWH via Renewable Energy Certificates for a 2-year period.

Recognition Award Criteria

Meet the requirements.

