



ROSEWOOD TUCKER'S POINT

BERMUDA

Green Workplace Awards Criteria 2011

By: Kevin Lanthier VP Facilities Management

Green workplace awards

Rosewood Tucker's Point is pleased to be part of the inaugural Greenrock workplace awards. Over the past four years, the resort has made a conscious decision to become better ambassadors and leaders in sustainability and ecological practices. We are proud of the many programs and initiatives that we have successfully completed. We look forward to a bright future for our guests, employees, resort and ultimately our small island which we all take pride in improving and implementing ways to preserve and protect all that it offers us.

Rosewood Tucker's Point Resort

- Tucker's Point Club, which includes Bermuda's finest hotel, private club and residential community, first broke ground in 2000. It has been a storied and successful project, with the Club's centerpiece, Tucker's Point Hotel & Spa debuting in April 2009. Tucker's Point employs over 200 full-time staff on a property in excess of 240 acres. The resort is complex in that it encompasses several entities including;

Rosewood Tucker's Point Entities

- 88 room hotel (170,000sqft) complete with full service spa, two restaurants, bar, full service fitness centre, business centre and commercial laundry. The hotel also houses a large IT infrastructure which supports and services the entire resort.
- Golf, Beach and Tennis Club (48,000sqft) The golf club includes large men's and ladies locker facilities, restaurant, dining room, private dining room, board room, full service and golf pro shop. Beach club offers full dining room, beach bar, adult and children's pools and full service beach attendants. The tennis facility boasts four Har-True clay tennis courts, locker rooms, retail sales center and pro shop.
- Tucker's Point has seven home owner's association which is comprised of fractional units and private homes. These six areas include; 1) Golf Villas Private Residence Club (53,000sqft) 20 fractional 3 and 4 bedroom units, common clubhouse with two pools. 2) Harbourcourt private residence club (46,135sqft) 14 fractional 3 and 4 bedroom units complete with games room, underground parking and private swimming pool. 3) Shell Point Ltd. (60,500sqft) 11 private estate homes. 4) Ship's Hill Townhomes (53,100sqft) 18 privately owned townhomes with common pool facilities. 5) Ship's Hill Estate Homes (49,000sqft) 13 private estate homes, 6) Harbour Court South (21,800sqft), 8 privately owned condominiums. 7) Harbour court north (47,700sqft) 6 privately owned estate homes.
- Tucker's Point has 13 vehicles servicing the resort with several utilizing Bio-fuel. The main resort transportation which shuttles guests throughout the 1 ¼ miles utilizes two Solar electric people movers. There are also 45 electric golf carts used by staff and a fleet of 35 electric golf carts for use by fractional owner residents. The golf course utilizes 100 electric golf carts for daily play.



Green Globe Certification

- In 2010, Tucker's Point made a conscious decision to become the leading "Green" resort in Bermuda and applied for international certification with Green Globe. Green Globe is a world leader in environmental practices, sustainability and "Green initiatives. In 2010, Tucker's Point made a conscious decision to become the leading "Green" resort in Bermuda and applied for international certification with Green Globe. Green Globe is a world leader in environmental practices, sustainability and "Green initiatives.
- "Green Globe Certification is the travel and tourism industries' world wide certification label for sustainable management and operations. To guarantee adherence to the highest international standards, a third-party independent auditor is appointed. The auditor is selected by the client from our international network to provide assistance and perform an independent evaluation upon completion of the certification process. The Green Globe Membership gives you immediate access to the certification criteria as well benchmarking tool.
- **A full audit and implementation period will commence September 2011.**

Criteria for workplace green awards by Greenrock.org

- *Criteria 1: Environmental Impact*
- *Criteria 2: Green Policies adopted and practiced by the company*
- *Criteria 3: Office Initiatives*

Criteria 1: Environmental Impact

Electrical Usage

- Rosewood Tucker's Point is a large consumer of electrical power. In the past couple of years we have worked on several key aspects of electrical savings throughout the resort. We have reviewed data month over month and year over year and have realized that occupancy in 2010 on the resort averaged 56%, with a proposed average for 2011 at 68%. The resort has also added several large systems including; commercial laundry, potable water pumping station, Reverse Osmosis Plant and several new home owners. To compile accurate year over year numbers we will need to see several month months of data before real numbers can be realized.

Energy Management

Maintain a resort wide **EMS (Energy Management System)** for all HVAC, Pumps, and Motors. This computerized system allows us to see every piece of equipment on screen in real time. We can adjust all operating parameters to effectively conserve energy throughout the resort. This system allows us to prepare a variety of reports which allows us to quickly see trends and in-efficiencies in the operation of all mechanical equipment. From these reports we can establish problem areas where further efficiencies can be introduced. Another major benefit to this system is the alarm reporting function. In the event of equipment failure or maintenance issue, the system automatically reports problems via email so the repairs can be made quickly and efficiently before catastrophic problems arise. The major energy savings application in the program is the fact that we can set schedules on all equipment, minimizing run time, temperatures and occupancy.

Energy Management

- Maintain a full ***Crestron Lighting system*** the Tucker's Point Hotel and Spa. This system allows us to utilize an online system to control the operation of all lighting throughout the hotel. To maximize savings of electrical consumption, we schedule the lights to operate only at times they are required. Further to the scheduling, we also have the ability to adjust the lighting levels from 10-100% of maximum output. Therefore, in areas that require lower lighting at night, we can operate the actual output around 50% to realize maximum operational savings.

Energy Management

- In 2010, we undertook the installation of a ***Power Save, Power Factor Conditioner***. This newly developed unit is installed on any 3 Phase electrical distribution panel. Once installed, this unit allows power to be evenly distributed from the source to the equipment. By conditioning the power delivery to the equipment, a cleaner source of power is realized. Therefore, whatever equipment is being operated from this panel, can see operational savings between 5-20%. Over the past year we have monitored these savings by installing an (ENVI) monitor. This monitor allows us to see actual electrical consumption in real time. Therefore we can compare consumption when the Power Save is on and off. In the past year we have realized a minimum of 15%.

Energy Management

- The hotel has a state of the art Domestic Hot Water and Swimming Pool Heat system. The system is called a ***Heat Harvester***. Electrical savings is realized because the heating of the water is achieved by utilizing the condenser waste water from the main Hotel Chiller plant.
- Throughout the resort we have been replacing standard incandescent light bulbs with one of three alternatives over the past several years. 1) High efficient/long life incandescent, 2) CFL's and 3) LED's. In 2011, we will operate our Golf Clubhouse solely on LED lighting technology.

Energy Management

- Bermuda's largest installation of Solar Hot Water panels was completed on the Golf Clubhouse in 2009. This installation has allowed us to eliminate the need for electrical hot water production. This new system has allowed us to trim our electrical usage by 20% in the Golf Clubhouse. We have also promoted this initiative by placing small signs in the washrooms informing guests and members that "The Hot Water you are using is being produced by the sun".

Resort Transportation



- The overall size of our resort demands that a full resort shuttle service operate seven days a week. Up until recently, we have utilized two diesel powered Land Rovers and several large trams to move guests throughout the property. In 2011, we have made a conscious effort to introduce new technology in our transportation services by purchasing two Solar Electric people movers. We have been operating these new vehicles for a month now and have seen the benefits both from cost savings, environmental impact and guest satisfaction. By retiring the diesel fleet of vehicles, we have received immediate benefits from the elimination of diesel fuel to vehicle repairs. For example, we have been able to reduce tires (approximately 60 tires per year were required to maintain the operation of two vehicles and four trams). Other consumables like motor oil, lubricants, grease etc, are also no longer required as the new vehicles require about 1/10th of these products.
- A side benefit not realized until the implementation of our new vehicles is the customer satisfaction level. Since we began operation, nearly every load of guest's comments and questions the vehicles they are riding in. They are surprised and excited to learn that they are riding in a very "Green machine". Guests are proud to be a part of our push for sustainable practices on the resort. They feel that they too are part of the bigger picture in assisting to keep Bermuda clean, safe and protected.

Waste Management

- The Waste Management program encompasses the entire resort including; 70 Estate Homes, 2 Fractional complexes with a total of 34 units (10-2 bdrm, 19-3bdrm, 5-4bdrm), 88 room hotel, 4 restaurant kitchens, 88 room staff dormitory, commercial laundry, golf clubhouse, tennis centre, beach club, central facilities/grounds department.
- Currently the resort has a contract with Atchison's Waste removal to collect refuse from 7 skips and 1 large trash compactor (hotel). Tucker's Point provides daily refuse collection to our 70 homes and 34 fractional units.
- Recycling is actively happening in our 70 estate homes. We have introduced TAG as pilot program with the majority of our home owners recycling Tin, Aluminum and Glass. The recycling is picked up daily and re-routed to the Bailey's Bay recycling Plant on a Bi-weekly basis by RTP staff. We are in the process of introducing TAG recycling to all other entities in 2011. *RTP is currently working with W&E to introduce waste pickup from the resort which will result in the removal of several skips from the resort. With the implementation of TAG and other recycling initiatives, we are hoping to divert up to 30% of our waste on the resort.*
- **Waste Vegetable Oil** recycling Tucker's Point recycles 100% of wvo (waste vegetable oil) from all four of our four restaurants. This wvo is turned into Biofuel through the use of our in-house processing plant. The Biofuel plant can produce up to 120 usgals of fuel per day. The fuel is used in many of the diesel powered resort vehicles.



Water Usage and Production



- Tucker's Point water infrastructure system allows for backup water supply to every entity on property. The resort has the ability to store up to 3 million gallons of water on property. Currently we are utilizing the Government water lines to satisfy our demands. In 2010 we have used 18,746,948 usgals.
- Rosewood Tucker's Point has recently installed and commissioned two 60,000 usgal/day sea water reverse osmosis water makers. This newly installed equipment allows the resort the luxury of producing enough water on a daily basis to completely be self sufficient. Furthermore, we have the ability to utilize any excess production for golf course irrigation or assisting our neighbors like the Mid ocean club when they require potable water for their resort operations. These water makers are currently operating at 35% recovery, a normal standard in the industry.

Wastewater Treatment Plant

- Tucker's Point operates its own waste water treatment plant which allows for 100% of all wastewater from the entire resort to be processed and re-claimed. A monthly average of 2.4 million gallons is processed in our state of the General Electric Zee Weed membrane processor. The quality of water exiting the plant is tested on a weekly basis and produces near potable water. This water is then transferred to our 2 million gallon pond, located on our golf course and used for golf course irrigation. Tucker's Point is proud to boast that 100% of all wastewater on our property is re-claimed and re-used on the resort.

Z-MOD M

up to 110,000 gpd (416 m³/d)*

- Fully integrated skid-mounted system
- Can operate at MLSS concentrations between 3,000 and 15,000 mg/L



Paper and Consumables

- Historically, Tucker's Point operated under 13 separate companies offering and delivering services to our clients through specific offices and personnel. During this period, each entity was completely responsible for purchasing any office supplies and equipment required for their daily operations.
- In 2009, as the construction phase of the resort was near completion, a conscious decision to combine offices and personnel as well as reduce the number of actual buildings took place. Throughout this time, the company introduced the idea of a central warehouse operation which would be responsible for all purchasing, logistics and shipping for the entire resort.
- Fast forward 2011. As Rosewood resorts has been contracted to manage the hotel and resort, even more downsizing has taken place. The resort has been able to reduce their reliance on paper and other office supplies by well over 50% in the past three years. With the implementation of the new central warehouse, all purchasing is now done through one area. This has allowed for better control of office supplies and paper. *We are in the process of implementing a complete paper recycling and reduction program which will allow us to divert an exorbitant amount of direct waste which has been included in our daily waste until now.*
- Tucker's Point has always enjoyed a very complex IT infrastructure and has encouraged the use of electronic communication wherever and whenever possible. Communication with the over 200 staff occurs on a daily basis both from the main executive office and from individual departments. The Rosewood Tucker's Point daily is posted at 4pm daily through email and reviewed each morning by every department on the property. This mode of communication has allowed for a drastic reduction in paper and other consumable use.

Criteria 2: Green Policies adopted and practiced by the company

- **Green Cleaning**
- Throughout the resort we have been conscious of using “best” practices and implementing “green” products to our resort. Currently we have five strategic areas on the resort which houses a bulk cleaning station. These stations contain four key products which is used throughout the resort. A general cleaning product, a degreaser, window cleaner and deodorizer. These products are supplied through a large distributor in Bermuda and are eco-friendly.
- The use of bleach, caustic chemicals, or other harmful products is discouraged unless absolutely necessary. We continue to educate or staff on the importance of preserving and protecting our environment and the reduction or elimination of such chemicals is vital to preserve not only Tucker’s Point but the island as a whole.
- Tucker’s Point is working towards replacing virtually all oil-based paints from the property with water-based, paint and eco-friendly products.

Green Purchasing

- With the implementation of our Rosewood Tucker's Point Central Purchasing and Logistics department, we have begun the arduous task of looking at Resort Wide purchasing for all departments. We have implemented a policy whereby we will do everything possible to purchase all resort needed products with approved green production practices.

Indoor Air Quality/Healthy Workplace

- Our Energy Management System which is in place throughout the resort allows us to constantly monitor all aspects of our HVAC systems assuring good quality IAQ. In addition to this powerful software, Tucker's Point enjoys the luxury of having a full-time dedicated HVAC specialist. This position allows us to implement and monitor a stringent preventive maintenance schedule. Adhering to this schedule assures us that filters and equipment are maintained to the highest standards on a consistent regular basis.
- The preventive maintenance program has been structured and built into our (CMMS) Computerized



Criteria 3: Office Initiatives

Innovation in workplace design or employee practices

- **Staff Cafeteria and internal food service and distribution**
- 200+ staff means a great deal of food is prepared daily. The resort accomplishes this large task in the hotel cafeteria and satellite lunch room. Food is prepared and served for lunch and dinner seven days a week. All utensils, plates and drinking vessels and food service vessels are 100% recycled as no paper/plastic products are used. ***We have a strict policy that no food leaves the lunch rooms which assists in controlling and eliminating the need for take out paper or plastic products.***
- Staff is encouraged to utilize personal drinking vessels as water, juices, coffee and tea are available 24/7.
- As we progress further with our recycling program implementation, a simple BYOB (Bring your own bottle) program will be expanded and enforced

Education within the community

- Woodland Management Program. This program implements guidelines outlining the protection of all flora, fauna and green spaces on the property. Among its initiatives
- Plant Nursery, where 90 percent of all of the trees and plants used in the landscaping of the property are grown
- Yellowwood Conservation and Protection Program, which ensures that the native tree species, including the Yellowwood, on Bermuda are not only protected, but embraced
- Bluebird Population Protection and Support Program erected bluebird boxes as homes for the bluebirds, a species native to Bermuda, on every 150 yard marker on the Tucker's Point Golf Course
- Cave Monitoring Protection Program protects Church and Bitchman Caves, which sit on Tucker's Point's 240 acres and are inspected twice annually to ensure full protection of the caves and the water that runs through them. The caves have been virtually untouched by the building of the Club and remain in pristine condition. These stringent environmental guidelines dictate that Tucker's point perform annual testing in the caves. These tests are performed by an independent consultant and forwarded to the Ministry of Environment.
- Biodiesel Plant Tours and Education. Throughout 2010/11, Rosewood Tucker's Point has hosted many school groups, associations and Bermuda College students. We have been able to raise the level of awareness of alternative fuels by allowing students to experience a hands on demonstration. We have also included Soap making as a unique program by utilizing the main byproduct of Bioefuel (Glycerin).

Community service related to the environment

- The Bermuda Audubon association has hosted birding events on our property for several years. Our Blue Bird box program in association with several other initiatives has made our property popular amongst outdoor enthusiasts.
- Rosewood Tucker's Point has hosted and donated conference rooms, meeting space, golf tournaments, prizes and a great deal more to non-profit entities and associations throughout Bermuda.