

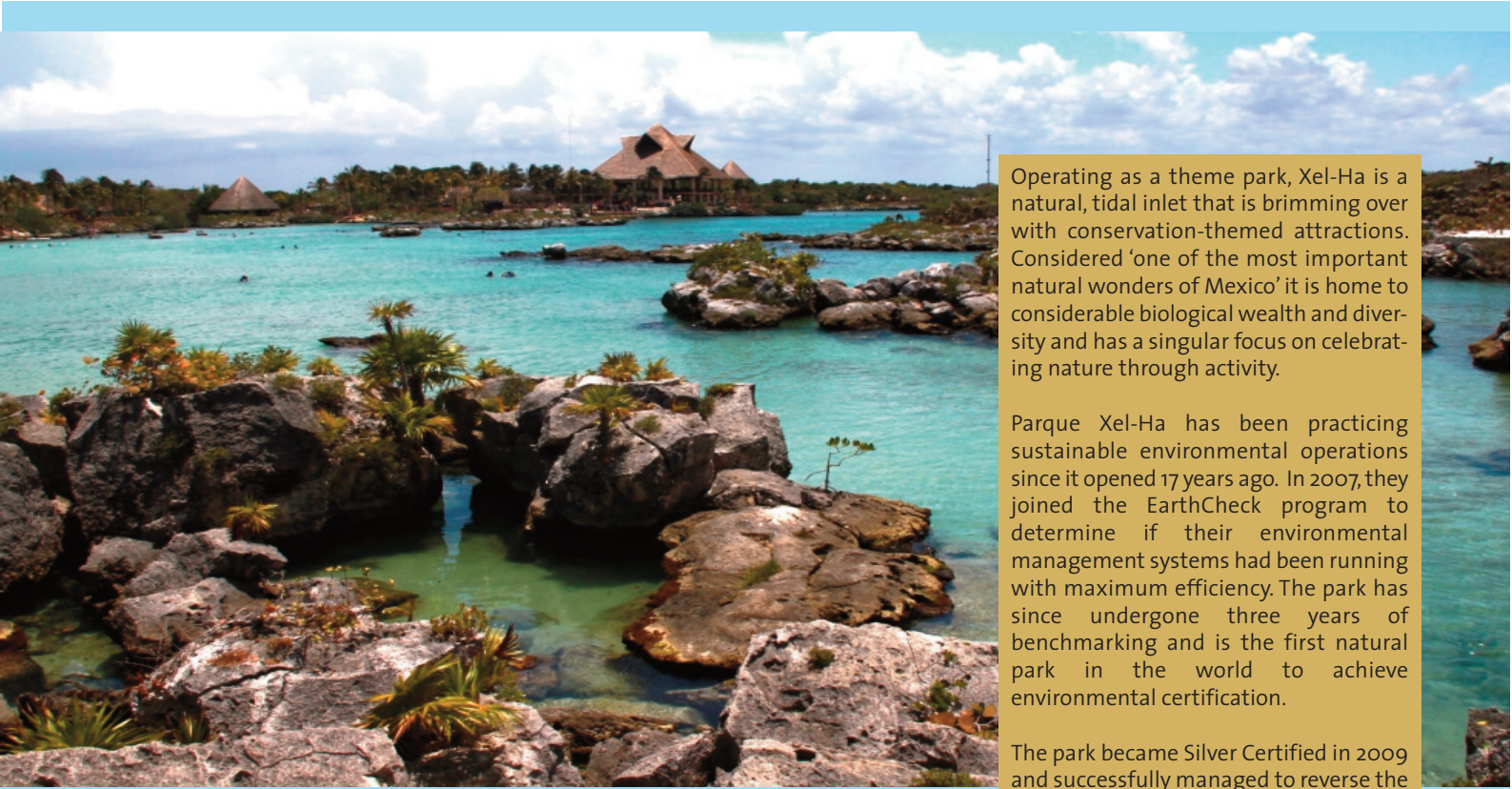


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PARQUE XEL-HA, MEXICO

It's hard to describe Parque Xel-Ha as a theme park as there are no man-made attractions or "rides". Indeed, the park features possibly the world's largest aquarium; only the fish are free to come and go as they choose.

Located 30 miles south of Playa del Carmen in the Riviera Maya region of Mexico, the strategy underpinning Xel-Ha is exceptionally clever and the result is arguably best of breed on a global scale.

Xel-Ha makes engaging with nature accessible for everyone; regardless of age or financial standing. For a moderate entry fee, it offers visitors an all-inclusive day of water sports, food and beverage, with optional activities such as swimming with dolphins or manatees.

The cleverness of this park is in its simplicity. Paths wind their way around a considerable lagoon area, allowing visitors to bathe in fresh water cenotes, to lie in hammocks overlooking secluded white sand beaches. Snorkelling gear and life vests are freely available, and floating or suspended bridges make access safe yet fun and give a soft adventure edge.

Inflatable rafts allow visitors to float down crystal clear fresh water rivers and photographers make the most of photo opportunities in seaside caves or at the base of diving cliffs that can be accessed by path or climbing rope. Zip lines and suspended rope bridges give a new perspective of wetlands below and wildlife can be encountered at every turn.

Operating as a theme park, Xel-Ha is a natural, tidal inlet that is brimming over with conservation-themed attractions. Considered 'one of the most important natural wonders of Mexico' it is home to considerable biological wealth and diversity and has a singular focus on celebrating nature through activity.

Parque Xel-Ha has been practicing sustainable environmental operations since it opened 17 years ago. In 2007, they joined the EarthCheck program to determine if their environmental management systems had been running with maximum efficiency. The park has since undergone three years of benchmarking and is the first natural park in the world to achieve environmental certification.

The park became Silver Certified in 2009 and successfully managed to reverse the impact exerted by mass tourism on the local ecosystem, allowing the inlet of Xel-Ha to rediscover its natural balance.

Parque Xel-Ha works every day at maintaining this harmony, not only in natural systems but also in the lives of their workers and the society around them.

Key achievements for (2009-2010) include:

Total CO₂-e produced was 0.7t per person year; **5.4% better than Best Practice**

Recycled/captured water was **60%**

Water savings rating was 82.2 points; **2.2 points better than Best Practice**

Waste sent to landfill was 0.089t per person year, which is **44.4% better than Best Practice**

Waste recycling rating was 88.3 points; **8.2 points better than Best Practice**

Recycled/reused/composted waste was **80%**

Habitat conservation area was 75%; **49% better than Best Practice**

The emphasis at Xel-Ha is on nature and this has resulted in the park being hailed as an extreme ecological and financial success. Operational practices have been cleverly thought-through to minimise consumption of natural resources and result in minimal environmental impact, despite the considerable number of visitors who pass through the gates each year.

Biodegradable, coral-friendly sunscreen is handed out on entry. Water bubblers and all-you-can-drink juice fountains are found throughout the park and plastic tumblers replace the need for bottled beverages; hence reducing waste.

With the considerable development of tourism in the Riviera Maya area showing clear signs of environmental degradation, the park serves as an example of how creative planning can lead to the rescue of one of the most beautiful and unique ecosystems in Quintana Roo.

KEY PERFORMANCE AREAS

WATER SAVINGS

Reducing Freshwater and Wastewater Generation

As Xel-Ha is primarily dependent on aquatic-based activities, water is a valuable resource to the park. The park therefore recognised that it was in their best interest to initiate the efficient management of water to reduce excessive use of this valuable resource.

Initiatives include:

- All toilets throughout the park are low/dual flush, and the park also has installed waterless urinals. Additionally, low flow tap and shower fittings were installed in a series of bathrooms across the facility. As a result of these water-saving fittings the park achieving a water savings rating of 82.2 points; **2.2 points better than Best Practice.**

- A water metering system was installed throughout the park to promptly detect leaks and display their location, which allows for the early repair of faulty systems. Preventative maintenance also is carried out on water infrastructure throughout the property.

- Basic leak checks are undertaken on a weekly basis by maintenance staff. These initiatives ensure minimal potable water goes to waste, resulting in a potable water consumption measurement of 31.6kL per person year; **2.5% better than Baseline Level.**

- The park utilizes a water treatment plant that treats 60% of park water, which is then reused to irrigate onsite green areas. These use minimal irrigation landscaping with

irrigation only carried out after dark to optimise maximum absorption to the water table.

- The park also has a water tank with a capacity of 30m³ to capture and reuse rain water.

- Park employees are trained on environmental issues and caring for natural resources. This same information also is communicated to the public through an environmental education program designed for children and eco-tours for visitors.

- Water quality tests are undertaken on a regular basis, with 100% of water samples passed in 2010, which is Best Practice.

ENERGY EFFICIENCY AND REDUCING GREENHOUSE GAS EMISSIONS

Parque Xel-Ha is situated on a large site of 84 hectares that requires a significant amount of energy to power. The efficient consumption of energy to reduce greenhouse gas emissions and electricity costs is therefore a priority.

The park implemented a solar heating program in 2005 that heats water throughout the site, contributing to 25% of energy used in the park originating from renewable sources.

As water heating is a considerable operational factor for the park, this initiative was extremely beneficial to the site's energy efficiency and reduced dependence on grid electricity consumption.

As a result energy consumption was 14508.2MJ per person year; **2% better than Baseline Level.**

Sustainable building design is used throughout the park's buildings, including skylights in the ceilings and light coloured walls that harness natural lighting and reduce dependence on electricity operation.

Preventative maintenance and monitoring programs were established for all equipment and machinery and vehicles used on-site. In 2010, the park serviced 100% of its vehicles to improve their efficiency, which is Best Practice.

The park currently produces 0.7t of CO₂-e per person year, which is **5.4% better than Best Practice.** It is currently undertaking a project to switch to biodiesel energy for onsite transportation to further reduce CO₂ emissions and have a lesser impact on air quality.

SOLID WASTE REDUCTION

The park has achieved Best Practice results in terms of solid waste management, accomplishing sustainable levels of waste generation throughout the site.

Initiatives include:

- An upgrade of waste management facilities in 2008 saw the park introduce a new solid waste system that involves separating different waste materials for their correct recycling.

This system has two phases, the first of which entails primary waste separation of organic and inorganic materials in park service areas.

The second phase includes the separation of metals, plastics, and paper for collection by local waste companies that transport





the waste to a recycling centre in Mexico City.

- An onsite compost centre processes the park's organic waste for reuse in the gardens. This facility deals with approximately 60% of the entire park's generated waste.

This upgrade of waste management facilities cost approximately \$3,000,000 pesos and contributed to a rating of **80% of solid waste recycled, reused or composted**.

Consequently, waste sent to landfill by the park significantly decreased to 0.089t per person year, which is **44.4% better than Best Practice**.

The success of this system has earned the park considerable attention from other organisations such as hotels, schools and NGO's wishing to learn about effective waste management.

- Information on waste segregation is given to park employees, which highlights the areas of waste collection and the importance of separation.

- Other waste initiatives include removing straws from bars and restaurants in the park.

These collective recycling initiatives resulting in a waste recycling rating of 88.3 points; **8.3 points better than Best Practice**.

Sustainable Purchasing to Reduce Waste

The park actively involves its supply chain in promoting and practicing sustainability through purchasing sustainable products.

Xel-Ha is able to further reduce their waste sent to landfill and minimise the chemicals that are often introduced to waterways by

harsh cleaning products.

The park seeks to purchase products that are made from recyclable materials in order to reduce waste. An example of this is purchasing recycled paper, which earned the park a paper products rating of 88.9 points; **8.9 points better than Best Practice**.

The park acquires its supplies in large quantities in order to reduce packaging and transportation requirements. Management also contacts suppliers to discuss ways to minimise packaging and operate in ways that are less harmful to the environment.

Biodegradable and environmentally friendly chemical products are used within the park. As a result a cleaning products rating of 90.5 points was awarded, **which is 10.5 points better than Best Practice**.

The park's pesticides products rating is 85.2 points; which is **5.2 points better than Best Practice**.

COMMUNITY EMPOWERMENT & SUPPORT

In addition to focusing on environmental sustainability, Xel-Ha also provides social support for the local community. The park encourages local groups to benefit from tourism while simultaneously preserving their traditions and culture.

Parque Xel-Ha supports the local economy by providing job opportunities to local residents and 73% of staff are from the Yucatan Peninsula.

Employing such a high proportion of local community members supports the local economy, awarding them a community commitment rating of 90%; **30% better than Baseline Level**.

The park favours local contractors for various services that are needed within the park and purchases a large proportion of perishable goods from local suppliers to support the host economy.

All staff receive training on sustainability issues and correct environmental practices that enhance the day-to-day sustainability of the park.

Parque Xel-Ha has allocated 75% of their total site for habitat conservation; **49% better than Best Practice**.

Xel-Ha's sea turtle program released **70,861 sea turtle hatchlings** in 09/10, and the on-site tree nursery reproduced **69,881 native plants**, including endangered species. This shows a dedication to maintaining native flora and fauna.

Xel-Ha is committed to supporting the development of the Chemuyil community; home of most of the park's staff. Education, health, sports, and cultural activities, as well as the installation of services and improvement of the urban village are some of the targeted areas of this project.

This program generates a positive impact for over 3,000 inhabitants through the following initiatives:

The park continues to support the operation of the 'La Ceiba' Library's Technology Training Centre, which was used by 6,755 people in 2010, 71 of which undertook the computer course.

- The space for 12 sporting and cultural events to be held each month.
- The provision of 12 Medical caravans in 2010, which serviced 1,476 people.

- A free Environmental Education Program for children in public schools in Quintana Roo aimed at promoting awareness in environmental care. These programs hosted more than 61,000 participants from more than 1,500 institutions and covered topics such as ecosystems, plants, sea turtles and water culture.

This range of social programs supported by Xel-Ha resulted in a community contributions rating of 79.2 points; **29.2 points better than Baseline Level**.

Other initiatives included the provision of 49,225 free samples of biodegradable sun block to visitors in 09/10, and the visitation of 6552 students and teachers to the park to study.