



**YTL**  
**CORPORATION**  
**BERHAD** 92647-H

the journey continues...

sustainability report 2009

# Contents

---

2	Letter from the Managing Director
6	<b>CORPORATE SOCIAL RESPONSIBILITY</b>
6	• Corporate and Personal Conduct
6	• Responsibility To Employees
7	• Responsibility To Shareholders
7	• Socially Responsible Business: The Roots Of YTL's Growth
8	• Awards & Accolades For Sustainability
8	• Professional Memberships
9	• Responsibility To The Community

---

10	<b>PROMOTION OF ARTS &amp; CULTURE</b>
12	• Commitment To Arts & Culture
13	• Harnessing Creativity Through Workshops And The Arts
15	• The Kuala Lumpur Performing Arts Centre (KLPAK)
16	• Lot 10 Rooftop – A Forest In The City

18	<b>SUPPORTING EDUCATION &amp; COMMUNITY DEVELOPMENT</b>
20	• For The Next Generation
21	• Supporting & Educating Local Communities
22	• For Our People
23	• Technology and Social Inclusion
23	• Hotels and Resorts
24	• Publications

---

26	<b>ENVIRONMENTAL RESPONSIBILITY</b>
28	• The YTL Group's Environmental Vision
28	• Environmental Division: Investing In The Future
28	• Energy Saving and Sustainability Planning
28	* Water & Sewerage Services
32	* Power Generation & Transmission
34	* Property Development
36	* Hotel Development & Management
37	* Express Rail Link
38	• Waste Management
43	• Biodiversity
48	* Partnerships With Environmental Organisations
52	• Climate Change
55	* Carbon Credit Consultancy Services
56	* Power Generation & Transmission
59	* Water & Sewerage Services
59	* Carbon Management
62	* Cement & Construction
64	* Express Rail Link

---

66	<b>BE PART OF THE SOLUTION</b>
----	--------------------------------

---

68	<b>FIND OUT MORE</b>
----	----------------------

---



**YTL  
CORPORATION  
BERHAD** 92647-H



## Letter from the Managing Director

Dear Stakeholder,

According to a McKinsey Report, of the world's 100 largest economic entities, 63 are corporations, not countries. Great power creates great expectations and society increasingly holds businesses accountable as the only institutions strong enough to meet the significant long-term challenges facing our earth. It therefore becomes more than a corporate responsibility and instead becomes crucial for corporate survival.

We understand that as corporate citizens, we must endure in an ever-changing world with more limits on resources and less credit, and companies must develop and execute a strategy for sustainability. Hence, sustainability should take into account every aspect of the business environment: be it social, economic and cultural or natural.

Personally, I believe a sustainable business means a business that can thrive in the long term and that true sustainability has four equal components:

- **Economic** – To help people and businesses meet their economic needs – for people: securing food, water, shelter and basic needs; and for businesses: turning a profit
- **Environmental** – To protect and restore the Earth – for example, by controlling climate change, protecting natural resources and managing waste more effectively
- **Cultural** – To protect and value the diversity through which communities discern their identity and cultivate traditions across generations

Green businesses, green jobs and emerging green economies will very much become part of a 'new world' now being born but 'green' alone is not a broad enough platform to sustain most businesses for the long haul. Instead, those that consider broader social issues will be better poised to lead and I have faith that at YTL, we will continue to march on to do our part as global citizens through leading with values.

- **Social** – To address conditions that affect us all, including poverty, violence, injustice, education, public health, and labour and human rights



**TAN SRI DATO (DR) FRANCIS YEOH SOCK PING, CBE, FICE**  
*Managing Director*



Over a decade ago, YTL began innovating ways to use clean technology, realising the implications of uncontrolled carbon emissions into the atmosphere, as well as exploring renewable energy sources, due to the heavy energy demands of the utilities and construction industries. For example, as a leading utilities player, we insist that our equipment suppliers continuously work to improve their technologies, not just because we demand it, but also due to the big consumer push for it.

At YTL, we have seen firsthand how sustainability programmes and policies have reaped outstanding results. To illustrate, I would like to share some of the latest developments and results from **Wessex Water**, our utilities company in the UK. Wessex Water has been recognised by the UK water industry regulator, Ofwat, as the most efficient operator in England and Wales for three years running, with several awards under its belt – including the first water company to receive the “Queen’s Award for Enterprise” for continuous achievement in sustainable development.

As a progressive water and wastewater treatment company, Wessex Water is very much focused on reducing its carbon footprint, targeting to become carbon neutral as a major part of its sustainability vision. This is crucial because the water industry happens to be an inherently energy intensive business. And this becomes more challenging each year, due to the stringent water and effluent regulatory standards in Europe, which require more advanced and energy intensive treatments. They have countered this increase in energy use through an annually renewed carbon management strategy, which helps offset some of this rise through their energy efficiency measures.

Our strategy is two-fold. Firstly, we have a **strong monitoring system** put into place to measure and track energy usage, and secondly, we are **pursuing and steadily increasing renewable energy usage**, wherever possible. This strategy applies to all our businesses within our Group.

In 2009, milestones of YTL’s corporate social responsibility achievements include winning the **Global CSR Awards 2009 Silver Award for “CSR Leadership Excellence”**. YTL Corp was also shortlisted for this year’s **ACCA Malaysia Sustainability Reporting Awards (ACCA MaSRA) 2009**.

Notably, Singapore featured heavily in our activities this year as we embarked on two sizeable acquisitions of prime assets on the island. On the utilities front, the Group acquired PowerSeraya Limited (“PowerSeraya”) which has a market share of about 25% of Singapore’s electricity market. PowerSeraya is unique in its complement of multi-utility operations that extend from its core electricity generation activities, including trading of physical fuels, oil tank leasing and trading of by-products of the electricity generation process. It is commendable that this year, PowerSeraya won not only one, but two Awards during the Singapore Green Summit (SGS), organised by the Association of Chartered Certified Accountants (ACCA) and the Singapore Environment Council (SEC). The Summit featured three award categories. PowerSeraya clinched two awards – for “**Best Sustainability Report**” and “**Best First-Time Report**” at the SGS – and a “**B+**” from the **Global Reporting Initiative (GRI)**, the global standard for sustainability reporting. This is the highest level obtained by a local company so far.

YTL also acquired a 26% stake in Starhill Global Real Estate Investment Trust (“Starhill Global REIT”) which has a retail and office portfolio currently valued at SGD1.95 billion and encompasses prime assets in Singapore, Tokyo and China.

On 28 March 2009, YTL participated in Malaysia’s very first “**Earth Hour**” which saw more than 20 of its iconic properties both in Malaysia and Singapore switching off their lights for an hour in respect of this global movement. Starhill Global REIT also subsequently won the World Wide Fund for Nature (WWF) Earth Hour Corporate Participation Award for “**Best**”

## Letter from the Managing Director

**Engagement Activities**”, for its innovative initiatives to engage business partners and shoppers at Wisma Atria, a leading mall along Singapore’s premier shopping street Orchard Road.

We also organised our third highly successful **Climate Change Week** from 24 May – 28 June 2009, designed to educate and raise public awareness towards the critical issue of global warming. This year, and in collaboration with the National Geographic Channel, YTL’s *Climate Change Week* brought to Malaysians all over the country the exclusive televised Malaysian premiere of the acclaimed documentary, *Strange Days on Planet Earth: Oceans*. Hosted by award-winning actor, director and environmental activist Edward Norton, *Dangerous Catch* and *Dirty Secrets*, the two latest episodes of *Strange Days on Planet Earth* offered a startling look into the health of the earth’s water system and the shocking truths which impact every single living being on earth. This is the first time YTL has partnered with National Geographic Channel, bringing together the channel’s vast global programming library and YTL’s corporate resources and experiences, to inspire Malaysians in the fight against global warming.

If we look back on history, the greatest social transformations of our age - the end of slavery, the abolishment of apartheid, the end of colonisation, the women’s rights and civil rights movements - all began with public awareness, then engagement. Those movements were led by scientists, thinkers, concerned individuals and young people. They led, and governments followed. This is the rationale behind our continued faith in *Climate Change Week*, our flagship campaign that continues to educate our nation towards the importance of climate change mitigation and environmental protection.

As stewards of our good earth, YTL has long supported conservation through international groups like *The Nature Conservancy*, as well as *WWF-Malaysia* and *Rare Conservation*. In 2008, YTL hosted a “Climate Change

Gala” in support of three local environmental organisations – Beneficiaries included the Malaysian Nature Society (MNS), Reef Check Malaysia and Treat Every Environment Special (TrEES), whom continue to inspire conservation in the nation.

Personally, I am also proud to serve in several non-profit organisations that make leadership in sustainability possible, namely *The Nature Conservancy (TNC)*, the *International Business Leaders Forum (IBLF)* and *The Institute of Corporate Responsibility Malaysia (ICRM)*. As a long time member of TNC, one of the largest conservation groups in the world committed to protecting nature’s most precious ecosystems, I had the privilege of working alongside world leaders to strategise, build partnerships and projects, as well as open doors to resources. At the rapid rate at which forests are disappearing, I am glad to have fostered a long-term partnership with TNC, who help protect forests globally through various schemes. In the past, YTL has donated to TNC a substantial amount of USD500,000 to support conservation efforts on forest protection and on coral reef conservation in South East Asia, primarily Indonesia.

Moving onto the Arts, I was recently appointed a patron of the *International Friends of the Louvre*, which raises awareness of this historical museum’s collections and museum expertise. At the American and International Friends of the Louvre forum held in Paris in June 2008, I was proud to help raise USD250,000 through a live auction, encouraging guests who bid for our exotic travel package – consisting of an experience on the Eastern and Orient Express train and a stay at our private island Pangkor Laut Resort – to visit our beautiful country of Malaysia.

Back on home soil, I am proud to be the honorary advisor of The Kuala Lumpur Performing Arts Centre (KLPAc). Here, my fervent passion for the environment and for the Arts has been realised through bringing nature and the artistic community together in Sentul Park, a 35-acre park in the heart of the city. Our





pioneering project, the *Bird Island Green Homes Competition*, which promotes sustainable development and energy efficient homes in Malaysia, also continues its course, with judging having taken place the year before and winners of the competition to be announced duly. Here, eight leading international names in architecture and environmental engineering compete to build six eco-friendly homes on Bird Island in our Sentul Park, creating a model for sustainable living that people around the world will be able to study and emulate. At YTL, we believe sustainable architecture is going to play a significant role in addressing climate change, due to its energy and resource efficient approach to development.

Going further, we are investors of both *The Asian Renewable Energy and Environment Fund (AREEF)* and *The Renewable Energy Fund (REEF)*, the latter of which was launched during *Climate Change Week 2008*. Both are vehicles that allow us to invest in and encourage companies that innovate in clean technology and the renewable energy sector.

Our carbon credit consultancy, *YTL-SV Carbon*, continues to grow steadily with a healthy client base. Having made strong strides in the areas of energy efficiency and renewable energy, it was a logical step for us to get involved in CDM – YTL-SV Carbon is currently the largest CDM consultancy in Malaysia and third largest in South East Asia. It is important to note that our specialist business not only helps YTL go carbon neutral in-house but also helps companies go “clean and green” through helping them apply for carbon credits through the Clean Development Mechanism (CDM). The Kyoto Protocol calls these credits certified emissions reductions (CERS) and allows Annex B countries, such as Malaysia, help meet their domestic emission-reduction commitments under the treaty. Recent studies have shown that the carbon trading business in Malaysia is expected to be worth RM3.2 billion and RM6.4 billion in the next few years,

driven by companies’ increased participation in environmentally sustainable projects. The Malaysia Energy Centre estimates that the country has up to RM100 million tones of carbon credit potential for the 2006 to 2012 period and it could benefit from carbon trading, which is now worth USD60 billion globally but could grow to USD1 trillion in a decade. Currently, the Government is also considering giving companies involved in CER, and renewable and environment-friendly energies a tax exemption for 10 years, investment tax allowances and import duty and sales tax exemptions on equipment.

For every crisis, there is an opportunity. The crisis we now face is our chance – and your chance – to build a strategy for sustainability not only into the core of your company, but also into your life. At YTL, I trust that we will continue to do our part in running the good race by continuing to adopt sustainable practices and corporate responsibility in all that we do.

As we look to the year ahead, and whilst the economic climate continues to fluctuate between expectations of further problems and hopes for recovery, the Group remains focused on its path – the long-term view that has brought us to this stage and will continue to form the foundations of our journey forward to continue to build a stronger brand for our customers, a stronger corporate citizen for our economy and a stronger corporation for our shareholders and investors.

And so, our journey continues.

May God bless each and everyone of you in all your positive endeavours.

**TAN SRI DATO (DR) FRANCIS YEOH SOCK PING**  
PSM, FICE, CBE, SIMP, DPMS, DPMP, JMN, JP



YTL Corporation Berhad (“YTL Corp”) and its subsidiaries (“YTL Group”) touch millions of lives because of the nature of the industries in which we do business. We employ more than 6,200 people around the world and have developed a global customer base, hence the big influence we have on the lives of millions of people. We have responsibilities to our colleagues, customers and suppliers, the environment and the communities where we live and work.

We strive to improve lives everywhere we operate, aiming for a healthy, safe and sustainable environment. Considering the needs of the present generation whilst, at the same time, anticipating the needs of future generations are milestones of our achievements, and the forefront of our future developments. Corporate responsibility is one of the YTL Group’s key values and something we take very seriously. Acting responsibly should be fundamental to how we carry out every aspect of our business. We demonstrate this with passion to our employees, our customers, the environment and society as a whole in a wide range of ways. Our ongoing commitments include supporting education and community development, promotion of arts and culture, and the protection of the environment, all of which are illustrated in this Sustainability Report.

#### CORPORATE AND PERSONAL CONDUCT

We expect all our staff to maintain the highest standards of propriety, integrity and conduct in all their business relationships. Intellectual integrity is encouraged and corruption is not tolerated. We apply a similar requirement to our conduct as a company, and undertake to comply with all applicable legal and regulatory requirements.

#### RESPONSIBILITY TO EMPLOYEES

We acknowledge our employees are the key to unlocking our potential to make a good business great. We know the value of our intellectual capital and show this by encouraging development, by recognising achievement and by looking after all aspects of their wellbeing. We are committed to ensuring equality of opportunity, and the health, safety and wellbeing of our employees in the workplace. All are encouraged to play a full part in guiding their own development.





## RESPONSIBILITY TO SHAREHOLDERS

We believe effective corporate social responsibility can deliver benefits to our businesses and, in turn, to our shareholders, by enhancing:

- Good management practices
- Investor protection
- Internal control systems
- Shareholder action
- Risk management performance
- Corporate leadership
- Relationships with regulators
- Social duty
- Staff motivation and attraction of talent
- Accountability
- Customer preference and loyalty
- Sustainable development
- Goodwill of local communities
- Information and transparency
- Long-term shareholder value
- Reputation, business trust and integrity

YTL Corp's statements on corporate governance and internal control are also included in this section of the Annual Report.

## SOCIALLY RESPONSIBLE BUSINESS: THE ROOTS OF YTL'S GROWTH

The YTL Group has embraced corporate social responsibility, ever since our humble beginnings in 1955. Starting out as a small construction company, our core competencies have expanded since then to include utilities, cement manufacturing, construction contracting, property development, hotel development and management, IT, e-commerce and technology incubation.

Our group understands that today, the increasingly competitive and challenging business environment means that we will need to work harder to ensure our people and stakeholders are not only rewarded but protected by the risks these challenges bring. This shared wisdom fuels our intention to perform in this area of corporate responsibility even more as we realise giving back to society and the people helping us on our journey becomes an imperative.

TIMELINE OF SOCIALLY RESPONSIBLE GROWTH

1955 - 1990

- First Turnkey Contractor in Malaysia
- Construction roots
  - Defence & Security – postcolonial era/Cold War
- New designs to make low-cost housing more attractive/spacious
- Nucleus Hospitals
- Schools & universities



Humble Beginnings

1990 - 2000

- Power, first IPP in Malaysia, borne of the power crisis in the early 1990s
- High Speed Rail, from KLIA to KL city center
- Cement, first ready-mix concrete company in Malaysia
- Hotels and Resorts, award winning luxury hotels, resorts and shopping centres



Contributing to Malaysia's Growth

2000 - Today

- Global Expansion
- ElectraNet, transmission and distribution in South Australia
- Wessex Water, water and wastewater company in UK
- Jawa Power, Paiton II Indonesian IPP
- Zhejiang Lin'an Jin Yuan Cement Company Co. Ltd, integrated cement company in China
- PowerSeraya Limited, multiutility operations in Singapore
- Starhill Global Real Estate Investment Trust ("Starhill Global REIT") encompassing prime assets in Singapore, Tokyo and China



Building a Global Presence

AWARDS & ACCOLADES FOR SUSTAINABILITY

- Global CSR Awards 2009 Silver Award for "CSR Leadership Excellence"
- ACCA Malaysia Environmental and Social Reporting Awards (MESRA) 2007 Award for "Commendation for Social Reporting"
- ACCA Malaysia Environmental and Social Reporting Awards (MESRA) 2006 Award for "Best Social Reporting in an Annual Report"

PROFESSIONAL MEMBERSHIPS

The Institute of Corporate Responsibility Malaysia

"The main objective of ICR Malaysia is to promote the development of socially responsible business practices. Apart from promoting sustainable development, initiating and embedding Corporate Social Responsibility (CSR) best practices will give Malaysian companies a competitive

edge in serving developed markets, whilst at the same time raising business standards for the benefit of all stakeholders."

- Institute of Corporate Responsibility Malaysia (ICRM)

YTL Corp is an active member of the Institute of Corporate Responsibility Malaysia (ICRM), a unique network of corporate and academic institutions committed to advancing responsible business philosophy and practices that will have positive impacts on people, environment and society. The main objective of ICRM is to promote the development of socially responsible business practices. As outlined by ICRM, Corporate Social Responsibility (CSR) aspirations are increasingly evident in the National Integrity Plan, the Ninth Malaysian Plan, the Capital Market Master Plan, the Silver Book – CSR Guidelines for GLCs, and the CSR Framework for Malaysian PLCs by Bursa Malaysia.

ICRM's Business Panel comprises government linked companies, local and multinational companies. As a Business Panel member, YTL's responsibilities include:

- Promoting, supporting and sponsoring capacity building programmes such as development of guidelines, workshops and conferences
- Sharing experiences on CSR agenda with other members through talks and articles
- Providing the Academic Panel ideas for research on CSR issues which are of relevance to local businesses
- Considering and commenting on any significant CSR or sustainability trends and issues
- Attending review meetings on a quarterly basis

More information on ICRM can be found on its website: [www.my-icrm.org](http://www.my-icrm.org)

## RESPONSIBILITY TO THE COMMUNITY

The YTL Group recognises our duty to be a good neighbour. We are an active partner of cities and communities, working closely with schools and charitable organisations to educate, support and engage with projects across Malaysia. From tackling poverty to helping children lead healthy and energetic lifestyles, we endeavour to build a better future for everybody.

### *'Toys for Tots' Campaign*

The annual 'Toys for Tots' Christmas charity campaign held at JW Marriott Hotel which YTL supports also enables guests and visitors at the Group's hotels to donate toys and gifts to benefit underprivileged children. The 'Toys for Tots' programme is one of the hotel's continuing efforts in reaching out to the society, in line with the "Spirit to Serve" tradition practised by Marriott properties worldwide. JW Marriott Hotel Kuala Lumpur appeals to the public to join in the spirit of sharing and caring for the underprivileged during Christmas by donating toys and gifts to children from selected homes.





"We must ensure that development of the arts keeps pace with our progress in other areas. For the arts help to define us, reflecting our values, our history and our aspirations. It is also our hope, through our unwavering passion for the arts, that one day, Malaysian artists and performers can stand proud on the world stage."

**Tan Sri Dato' (Dr) Francis Yeoh Sock Ping** CBE, FICE  
*Managing Director of YTL Corporation Berhad*



## PROMOTION OF ARTS & CULTURE

### COMMITMENT TO ARTS & CULTURE

YTL Corp is a passionate supporter of the arts and culture in Malaysia. We are a founding partner of the **Kuala Lumpur Performing Arts Centre (KLPac)**, together with Yayasan Budi Penyayang Malaysia and The Actors Studio. KLPac is the home for the performing arts in Malaysia, which is located in The Park at our Sentul development. This is a RM25 million effort from our part.

We take every opportunity to support productions that tap the potential of local talent and to encourage the development of our own arts and cultural scene in Malaysia to showcase the uniqueness of our heritage and also providing the people of the city an alternative medium of expression and communication.

YTL Corp is also passionate about music and believes in harvesting talent to foster appreciation of musical talent. Our Managing Director, Tan Sri Dato' (Dr) Francis Yeoh Sock Ping was the President of the **Kuala Lumpur Symphony Orchestra Society**, an orchestra comprised of local young talented classical musicians, for six years. YTL Corp has also been sponsoring the **YTL-Penang Arts Festival** since 2000.

#### YTL Concerts of Celebration

# 50<sup>YTL</sup>

## Celebrating Fifty Years of Running the Good Race

Perhaps our most unique efforts are our **Concerts of Celebration** which have been held at many different locations and free tickets are usually given to the public to attend. In September 2002, a momentous concert was held at our resort island of Pangkor Laut, where world renowned tenor, the late Luciano Pavarotti, was invited to sing to a global audience to foster peace and understanding, after the tumultuous events of 11th September 2001.

On the global front, YTL Corp orchestrated a performance by three famed tenors – the late Pavarotti, Domingo and Carreras – for the city of Bath, in Wessex County in the United Kingdom, to an audience of 50,000, in August 2003. This was done as a gesture of thanks to the people of Britain who welcomed our investments.

In December 2005, the YTL Corp Group celebrated its 50th Anniversary by staging a free concert at our Sentul Park development in Kuala Lumpur, featuring Britain's top tenor, Russell Watson, accompanied by the acclaimed Adelaide Symphony Orchestra. Russell Watson will yet again return to perform at YTL's celebrated "A Journey Through Time" Luxury Watch Fair in December 2008.



*The cast of "Tunku – The Musical" with Tan Sri Dato' (Dr) Francis Yeoh Sock Ping and special guest Mel Gibson.*



Photo on left: Poster Campaign featuring renowned British Tenor Russell Watson. Photo on right: (L-R) Frank Low, CEO of Luxury Concepts, Lewis Gordon Pugh, Explorer and Ambassador of VILLEMONT, Ruth Yeoh, Director of Investments at YTL Corp, Olivier Muller, CEO of VILLEMONT and Jorgen Amundsen, Director of VILLEMONT.



### **“A Journey Through Time” Luxury Watch Fair – Time for the Environment**

Now in its third consecutive year, YTL and Starhill Gallery have played host to watch connoisseurs and collectors from all around the world. Working with leading publishers Forbes and the Tourism Ministry of Malaysia, YTL hosts *A Journey Through Time*, a luxury watch fair intended to attract visitors to Malaysia. It is anticipated that *A Journey Through Time 2009* will see many more visitors and guests at Starhill Gallery journeying through the boutiques and booths adorned with exquisite jewellery and timepieces of timeless beauty. This year’s theme is “Time for the Environment” and will feature several environmental ambassadors championing this global cause to inspire positive change.

Previous years saw the Malaysian launch of the VILLEMONT “Arctic Explorer” Lewis Pugh Limited Edition watch, brought in by Khronos and Luxury Concepts, and officiated by Frank Low, Olivier Muller, Lewis Gordon Pugh, Jorgen Amundsen and Ruth Yeoh. Through its strong connections with exploration, particularly of the Poles, VILLEMONT has a genuine concern for all aspects of global warming. By becoming a partner and the official timekeeper of Lewis Gordon Pugh in his adventure to the North Pole, VILLEMONT wished to make a contribution by raising awareness on global warming and in particular, the melting of the polar ice caps. The company notably donated a proportion of the proceeds from the sale of watches to support WWF’s fight against global warming, and in particular, their mission to save the polar regions.

### **HARNESSING CREATIVITY THROUGH WORKSHOPS AND THE ARTS**

YTL understands the need to appreciate, encourage and reward artistic talent and we do this in several ways.

#### ***A Midsummer Nights Feast at Starhill Gallery***



*Chefs in action: (From right) YTL Corporate Executive Chef Kevin Cape and Golden Chef Hats Award gold medal winner chef Stephen Mercer preparing dishes in the open concept kitchen at Shook! Restaurant.*

For the second year running, from 3 – 12 July 2009, Starhill Gallery hosted a Food Extravaganza themed “July Around the World”. The restaurant’s thematic nights included speciality cuisine from Australia, Italy, Japan, Shanghai, Hong Kong and even a taste of a **Lifestyles of Health and Sustainability (Lohas)** menu that uses organic ingredients.

*Feast Village Junior*



In conjunction with Midsummer Nights Feast, Starhill Gallery's Feast Village Junior saw 40 children taking part in the programme packed with fun and adventure.

The Feast Village Junior Programme is targeted at children aged 4 – 12 with the purpose of educating them about the importance of a healthy and balanced diet.

The programme introduces the 'Eat Healthy Plate', which is adopted from the **Food Standards Agency UK**, and can be used to educate children about the five food groups and to guide them on the correct proportion of foods to be consumed. The half-day event at Starhill Gallery's Feast Village aimed to introduce kids to good, and wholesome food that is fun and which make meal times exciting.

The Feast Village hosts 11 eateries, all offering a fine selection of food which are healthy and offers you a balanced diet when dining out. The children took a tour of Feast Village restaurants and sampled some of the food they offer. It was an enjoyable experience as the children learned from YTL Executive Chef Kevin Cape to make pizza while chefs from Enak restaurant taught the kids to make 'Onde Onde' – a famous local desert. The kids also got the chance to decorate their own cupcakes, as well as sample the wholesome cooked food during lunch.

Childcare experts Karen and Charlie, conducted the programme, educating the children on eating a well-rounded, healthy and balanced meal. Parents were not left out as award-winning Author and Chef Mohana Gill gave a talk on preparing healthy meals for their children. Chef Mohana has previously written the award winning *Vegemania!* which was named "Best Vegetarian Book" in *The World and Fruitastic!* which was awarded the prestigious Gourmand World Cookbook Awards prize for the categories, "Best Single Subject Cookbook" and "Best Health and Nutrition".

*Starhill Gallery Arts Festival*

From 1 – 31 October 2009, YTL hosted a myriad of environment-themed art exhibitions in an Arts Festival held at its Starhill Gallery premises. The Starhill Gallery Arts Festival 2009, endorsed by the National Art Gallery, featured an eclectic collection of art pieces from local and international artists. The festival saw the entire "Muse" Floor of Starhill Gallery transformed into a giant art gallery.



(L) Dato' Yeoh Soo Min, Tan Sri (Dr) Francis Yeoh and Encik Haned Masjak paints on a sculpture by Yusof Ghani (R) Dato' Dr Sheikh Muzaffar, Yusof Ghani, His Excellency, Ambassador Alejandro A. Gordillo, Peruvian Ambassador to Malaysia and his wife, Dato' Yeoh Soo Min, Tan Sri (Dr) Francis Yeoh, En. Haned Masjak and Dr. Ng Soon Gan.





Yeoh with artists and guests at the launch of Starhill Gallery Arts Festival 2009.



"Kenduri at Noon", a work resembling corals and made from satay sticks and glue by young local sculptor Haffendi Anuar – Photo by Andrew Sia, The Star.

This year's Exhibition, themed "Passions", literally came alive with larger-than-life sculptures and three-dimensional art that's the first of its kind by Malaysian sculptors and artists.

#### THE KUALA LUMPUR PERFORMING ARTS CENTRE (KLPAC)

YTL strives to encourage the creativity of children through a rich variety of programmes which offer not only memorable experiences but which also broadens their learning capacities. We believe learning and creativity are imperative in incubating talent, and the best means is to provide a platform which children and young adults can interact.

YTL has historically sponsored numerous musical performances of which most are tailored to families and have also initiated several activity workshops at The Kuala Lumpur Performance Arts Centre (KLPac) at our Sentul Park development. The KLPac/PentasSeni KL is the result of a strategic partnership between

Yayasan Budi Penyayang, YTL Corporation Berhad and The Actors Studio, under the patronage of the late YABhg Datin Paduka Seri Endon Mahmood. It was built for the common goal of nurturing and developing the performing arts in Malaysia, where the Centre caters to a broad spectrum of artistes and audiences with its diverse artistic and educational programs.

Opened in May 2005, KLPac is Malaysia's only fully integrated performing arts centre, located at the fringes of Sentul Park, Kuala Lumpur. KLPac's calendar for the past three years have been filled with a multitude of both local and international performances from music and dance festivals to theatrical productions and art exhibitions. The Academy@KLPac has attracted students to its wide range of performing arts courses, facilitating the education of artists as well as audiences with the centre's 70,000 square feet of space housing facilities including a 500-seater main theatre, a 200-seater experimental theatre, 9 studios, an IndiCine theatre for independent film, a set construction workshop, and a cafe and bar area. Visit [www.klpac.com](http://www.klpac.com) to find out more.



**LOT 10 ROOFTOP – A FOREST IN THE CITY**

Lot 10, The iconic green building owned and managed by YTL, and which first made its mark in 1990, underwent a massive renovation from its basement right up to its rooftop in keeping with the times and catering to the new breed of urbanites or “greenagers” who are today, a more knowledgeable, tech-savvy and environmentally-conscious bunch.

*“Lot 10 will be the new urban playground for youth of today. With Lot 10, YTL can fulfil its desire and social responsibility that has always been close to our hearts and that is to bring an entire ‘Forest In The City’ – right here on the Rooftop at Lot 10,”* said Tan Sri (Dr) Francis Yeoh at the press conference of the launch which highlighted some of the changes taking place in the mall.

With more and more forest being cleared to make way for concrete jungles, YTL’s ‘Forest In the City’ initiative helps to reverse this process by bringing

back a bit of greenery to the city. The Rooftop of Lot 10 which was formerly a car park, has since undergone a major transformation and now houses a fitness club, a dance club, a restaurant and The Actors Studio (formerly in Bangsar Shopping Centre) set amidst lush greenery of overhanging ferns and emerging foliage and a variety of tropical plants.

The Rooftop Fitness Club which is already in full operation, encourages healthy living and is already filled daily with energetic crowds of fitness and health enthusiasts working out in a glass-encased studio which gives them a breathtaking view of the KL City skyline. Finding a new home for “The Actors Studio” was tough for Dato’ Faridah Merican and Joe Hasham but they have finally found a home in their brand new theatre set right in the heart of The Golden Triangle. Spanning over 8,000 square feet, the new premise will feature a 250-seat theatre and highlights the country’s first and only Hanamichi style T-Shape stage inspired by the Kabuki Tradition.



*Fashion show by Zang Toi; performance by Lee Swee Keong of The Actors Studio.*



**The Rooftop Garden at Lot 10**

The Lot 10 official launch was a ten-day celebration spanning from 10 – 19 October 2009. Various boutiques opened its doors during this period and an exciting array of exhibitions took place on the



concourse floor of Lot 10 Shopping Centre, including the exhibition by National Geographic themed 'Colours of Africa' and Lot 10's very own Photography Exhibition themed 'Faces of Bintang Walk'.

Visit [www.lot10.com.my](http://www.lot10.com.my) for more details



**The Actor's Studio (TAS) at the Lot 10 Rooftop, Bukit Bintang**

Recently opened at the newly-renovated Lot 10 Rooftop, The TAS at YTL's Lot 10 space ups-the-ante in the Malaysian arts scene. The new space places the audience far closer to the action than the local arts scene is used to. Using a Japanese design, the 'Hanamichi' stage in the new theatre will have a wide 'catwalk' extending from the centre of the background of the stage, giving it a 'T' shape and good acoustics. Lot 10 also has the advantage of convenience and access with the Bukit Bintang monorail station directly outside the building, encouraging public transport access which in turn helps to reduce transport emissions into the atmosphere.

Visit [www.theactorsstudio.com.my](http://www.theactorsstudio.com.my) and [www.taslot10.wordpress.com](http://www.taslot10.wordpress.com) for more details.



“At the heart of YTL, we are still builders. With our projects, the primary aim has never merely been to build houses, it has been to create communities and to provide a lifestyle for them to grow into. Today, we fill what we built with communities. We make them into the best resorts in the globe. We make our shopping premises into an unprecedented gallery of rich experiences. We also build trains that speed millions from the Kuala Lumpur airport to the centre of town. We build power plants that help our country and our region deal with the challenges of rising demand for electricity. And we never stop thinking about how to ensure our building improves the quality of life for Malaysians, and those who come here.”

**Tan Sri Dato' (Dr) Francis Yeoh Sock Ping** CBE, FICE  
*Managing Director of YTL Corporation Berhad*



# SUPPORTING EDUCATION & COMMUNITY DEVELOPMENT

## FOR THE NEXT GENERATION

At YTL, we believe that effective human resource utilisation and efficient teamwork are vital in achieving our aspirations. With the various businesses we are in, we do offer a wide range of career paths for those with the ability and desire to excel. Visit [www.ytl.com.my/career.asp](http://www.ytl.com.my/career.asp) and [www.ytlcommunity.com](http://www.ytlcommunity.com) for more details on recruitment.

The YTL Group continues to play a strong role in growing and safeguarding the potential of our future generation of leaders and supporting local communities by offering scholarships to deserving individuals and through participation in adopt-a-school programmes.

### YTL Foundation

We believe education plays a strong role in growing and safeguarding the potential of our future generation of leaders. The YTL Scholarship Foundation was established in 1995 with the objective of promoting higher education in Malaysia by offering scholarships to deserving individuals who would otherwise be denied of higher education due to financial constraints. Given the opportunity, we believe such individuals will be able to achieve their full potential and assume leadership positions to contribute towards the nation's economic development.

### The YTL Power International Berhad Scholarship Fund



The YTL Power Scholarship Fund was established to complement the YTL Scholarship Foundation with the objective of promoting higher education by offering scholarships to qualified students who are pursuing full-time foundation and degree courses at University Tenaga Nasional (UNITEN), a local university in Malaysia offering courses in Engineering, IT & Accounting. Given the opportunity, we believe qualified individuals will be able to achieve their full potential and assume leadership positions to contribute towards the nation's economic development. Visit [www.ytlcommunity.com/scholarship](http://www.ytlcommunity.com/scholarship) for more details.

### The University of Nottingham in Malaysia



The University of  
**Nottingham**

*Photo courtesy of the University of Nottingham (UK);  
Source: <http://www.alumni.nottingham.ac.uk>*

In line with our plans for educational expansion, we have fostered a joint partnership with The University of Nottingham in Malaysia. Nottingham is declared one of the ten best universities in the United Kingdom, alongside institutions which include Oxford, Cambridge, Imperial College London and the London School of Economics.

The established world rankings index compiled by Shanghai Jiao Tong University ranks Nottingham 10th in the United Kingdom. The Times Higher World Rankings also places Nottingham in the Top 1% of all universities worldwide. The institution is now firmly established within the world's 100 best universities in both tables.

The University of Nottingham also undertakes world-changing research, provides innovative teaching and a student experience of the highest quality. Ranked by Newsweek in the world's Top 75 universities, its academics have won two Nobel Prizes since 2003. The University of Nottingham has risen in world rankings and was declared Britain's 'University of the Year' 2006/7, receiving the 'Times Higher Awards 2006' for education.

The University of Nottingham has opened pioneering campuses in Asia, with the establishment of a multi-million pound campus in Malaysia, followed by the official opening of the first foreign university campus inside the People's Republic of China. The University's campuses in Nottingham UK, Malaysia and The People's Republic of China are award-winners in themselves. Open parkland sites, with gorgeous landscaping and signature architecture, they offer an unrivalled setting for learning.

The University Park campus in Nottingham UK has also won a 'Green Flag' award for seven years in succession. With its rolling parkland, landscaped gardens to rival Kew, and eco-friendly maintenance techniques, The University of Nottingham's main

campus is considered one of the greenest in the country. The Green Flag is the seventh annual award in a row for University Park, the highest number ever awarded to a UK university over successive years. Green Flags are widely acknowledged as the benchmarks of excellence for parks and recreational spaces. They are only awarded when several standards are judged to be met including high quality horticulture, working local community partnerships, environmental quality, cleanliness, accessibility and sustainability. Over the past few years, the University has also won numerous other awards for its landscaping, including a British Association of Landscape Industries Award, a Civic Trust Award, Britain in Bloom Public Park Award and several awards from the Nottingham in Bloom Competition. In 2008, University Park also won an East Midlands In Bloom 'Special Award' For Horticultural Excellence.

The University of Nottingham Malaysia Campus has a joint partnership with two local partners. The new campus (which opened early in 2005) sits on a 101-acre site close to Semenyih, 30km south of Kuala Lumpur, and is the first purpose-built campus of a British university outside of the United Kingdom. Built at a cost of RM120 million, it offers a high quality learning and living environment. Facilities include laboratories, library, sports complex, and Student Association building, bookshop, café and convenience stores, amongst others. Since opening its doors in Kuala Lumpur in September 2000, with just over 90 students, the student population has now grown to an international population of 1,300 students from more than 30 countries.

### *The Universiti Malaysia Sabah*

Our Chairman, Tan Sri Dato' Seri (Dr.) Yeoh Tiong Lay, is currently Pro Chancellor of The Universiti Malaysia Sabah and attends convocations at this university annually, awarding certificates to its thousand-strong Graduates. Universiti Malaysia Sabah (UMS) was the first local university to be built in the town of Beaufort, Sabah. As the ninth university to be established in Malaysia, it has expanded rapidly since the early days of its inception, and is a great asset to the community and development of Sabah.

Since its inception on 31st January 1994, the development of Universiti Malaysia Sabah (UMS) has been progressing at a tremendous pace. The physical development of a permanent campus on a 999-acre piece of land began on August 1995 and was completed in 2000, with the university's occupation of the permanent campus beginning in 1999. The Malaysian Government then granted approval to UMS to set up a branch campus in the Federal Territory of Labuan. Years that followed the acquisition of building

facilities for teaching, learning and research have witnessed the emergence of an increasing number of schools, centres and units at the university.

The university is now fully committed to achieving the highest standards of quality in both academic and non-academic activities. In line with the development of Malaysia as a Centre of Educational Excellence, YTL Corp donated RM2.5 million to the Universiti Malaysia Sabah (UMS) Foundation in June 2004.

## **SUPPORTING & EDUCATING LOCAL COMMUNITIES**

### *YTL PT Jawa Timur (Indonesia)*

A Community development program is actively being carried out by YTL Power's PT Jawa Timur plant, as part of their Corporate Social Responsibility (CSR) commitment. PT Jawa has performed various social initiatives for local communities. Education improvement, income generation, health and environmental improvement were the main programmes of this community development drive. PT Jawa believes that education plays a vital role in helping local communities and that it will have truly lasting impacts in building the human capacity necessary to sustain long-term social and economic development in its nation of Indonesia.

YTL and Jawa Power has contributed significantly to community education improvement locally. In November 2008, a local school, SMA Tunas Luhur, was officially inaugurated. The inauguration was attended by the German Ambassador, the Regent of Probolinggo, and President Directors of PT YTL Jawa Timur and PT Jawa Power. The senior high school is located in Sumberanyar village. Another school that the plant has supported in the past include SMP Bhakti Pertiwi, a junior high school which was established in 2003. Bhakti Pertiwi and Tunas Luhur are full-day schools. Tunas Luhur has two blocks of two storey buildings comprising of 12 rooms in an area of 8,450 m<sup>2</sup>. It accommodates 150 students under a moving class system. Currently, Tunas Luhur has some 132 students in three grades. Each has two parallel classes.

SMP Bhakti Pertiwi has achieved "best and high exam scores" in the recent National Examination results for Probolinggo regency level. The school has achieved such a high academic performance since its first graduation ceremony held in 2006. One of Bhakti Pertiwi' students ranked 7th, out of 600 thousands students, for the province of East Java. In terms of National Exam Results, SMA Tunas Luhur ranked 2nd for Probolinggo regency. Most all of its first graduates have been accepted in some state Universities for the coming 2009-2010 academic year.

The SMA Tunas Luhur new school facility



#### *PowerSeraya (Singapore)*

- *Nithiah Nandan Book Prize*

In 2008, book prizes worth SGD\$1,000 each were awarded to three of PowerSeraya employees' children at the inaugural Nithiah Nandan Book Prize giving ceremony which was held in conjunction with the long service awards for our employees. Set up in 2007, this book prize was created in honour of the late Mr Nithiah Nandan, the former executive secretary of the Union for Power and Gas Employees (Singapore) for his support for lifelong education and dedication to serving others. The book prize recognises the exemplary performance of the employees' children who have excelled in their areas of interest outside the academic field or who have made meaningful contributions to the community or the environment.

- *NTU Scholarships Programme*

In 2008, PowerSeraya gave out scholarships to two outstanding students of NTU (Nanyang Technological University), making it the first energy company to set up private support with NTU in Singapore. The awardees, one a second year undergraduate studying Accountancy and the other a third year undergraduate studying Mechanical Engineering, were also given internship opportunities at PowerSeraya.

The scholarship worth S\$8,000 per annum was a bond-free programme open to all second year students from selected courses at the College of Engineering, College of Science and the Nanyang Business School. Each year, between two to six undergraduates with outstanding academic results

and good Co-Curricular record will receive this prestigious scholarship. Additional consideration is given to students who have done either an environmental project or have contributed meaningfully to the community.

Other notable community contributions by PowerSeraya include the following:

- **UPAGE Bursary Awards** – providing financial support to industry union for industry employees' children to pursue their education (ongoing)
- **SHARE Program** – enabling employees to make monthly contributions to the needy via payroll (ongoing)
- **New Elementary Maths (NEMS) Activities** – in support of children with special needs (Pathlight School) or children from disadvantaged families (Child @ Street 11)
- **Greenridge Secondary Outreach Programme** called "Care for the Community"

#### **FOR OUR PEOPLE**

As a Group, YTL understands the immense contribution of our people towards our growth and success, and we organise workshops, gatherings and teambuilding ("offsite") events to enhance and foster unity within our people. On top of our Employee Welfare provisions, we also aim to inspire employee and leadership skills through our YTL Leadership Conferences, held annually. Technology also plays a crucial role in the social inclusion element of our organisation.

#### *Employee Welfare*

Providing a healthy and safe working environment is of utmost importance at our organisation. We have a Group Hospitalisation and Insurance Plan which ensures the health and safety of our workforce. We also provide our employees with Optional Saving Schemes at preferential rates, 13-month wage supplements to supplement higher costs of living, and an Employees' Share Options Scheme.

#### *YTL Leadership Conferences*

The YTL Leadership Conference is an annual gathering of more than 500 senior managers and directors ("leaders") from all the major subsidiaries of the Group, who attend a 2-day Forum for discussion on leadership issues. Leaders are invited to present progress of their management and share key wisdoms on leadership strategies, according to their responsibilities and the theme of the conference, which varies every year it is held. YTL's Leadership



Conference 2009 this year is themed “Stick to our Blue Ocean Strategy”, where sustainability will also be discussed as a growing area of importance.

Our Chairman, Tan Sri Dato’ (Dr.) Yeoh Tiong Lay, our Managing Director, Tan Sri Dato’ (Dr.) Francis Yeoh, and fellow members of the Board normally chair and moderate these sessions, contributing to the dialogue on leadership. The conferences are very open and every colleague of ours are invited to share their views and ask questions, creating a forum for ideas exchange, inspiration, interaction, collaboration and communication.

## TECHNOLOGY AND SOCIAL INCLUSION



Technology incubation is a business that YTL dedicates time to developing because we understand that developing our intellectual capital and communications in turn helps to develop our innovation potential of our Group. YTL e-Solutions becomes the bridge connecting our people and stakeholders, communicating the most up-to-date business and company-related matters to our people whom, in effect, make up our “YTL Community”. It is an incubator and investor in high growth, knowledge intensive companies that leverage on new technologies which enhance and integrate with the Group’s existing businesses.

YTL e-Solutions’ stable of businesses currently comprises Extiva Communications Sdn Bhd (“Extiva”), Infoscreen Networks Plc (“INP”) and its wholly-owned subsidiary, YTL Info Screen Sdn Bhd (“YTLIS”), PropertyNetAsia (M) Sdn Bhd and Y-Max Networks. Extiva provides value-added AVSP and telephony solutions and services and YTLIS is a leading plasma-based digital media networks in Malaysia with high quality “in-house” digital content.

In March 2007, YTL e-Solutions was awarded with one of three WiMax licenses in West Malaysia and it is anticipated that the deployment of WiMax will significantly improve Malaysia’s broadband penetration

rate and provide high speed broadband access to the masses, over a larger area than what Wi-Fi hotspots can provide. YTL Communications Sdn Bhd was subsequently set up to oversee the operations of this much-anticipated technology. Through leveraging on these technologies, the media and online communication tools, we enhance the community aspect through social inclusion, updating our stakeholders and customers on YTL’s latest developments thereby encouraging transparency and knowledge towards our operations, products and services.

YTL e-Solutions also powers YTL’s corporate websites and the *YTL Community* website, which provides the latest news and information not only on YTL but on the world at large. It also includes announcements of social events and powers other related websites of the other YTL subsidiaries. There is also a channel available for customers who frequent our properties to interact with each other through the YTL Platinum Plus membership. The YTL Platinum Plus lounge and concierge service has been set up at Starhill Gallery purely to provide customer service and to inform customers of upcoming YTL social events. We invite you to visit [www.ytlcommunity.com](http://www.ytlcommunity.com) and [www.ytlplatinumplus.com](http://www.ytlplatinumplus.com) to sign up to our e-mailing list and to find out more about us. Come join us in our journey.

## HOTELS AND RESORTS



In 2009, our premier hotel chain, the Ritz-Carlton in Kuala Lumpur, came up tops for the third time running in Hewitt’s Best Employers in Malaysia (BEM) study. It also topped the list in 2003 and 2005. The results of the study were announced at a seminar titled “Becoming a Best Employer — Lessons from the Best Employers 2009 Study” organised by Hewitt and The Asian Strategy and Leadership Institute (ASLI).

## Supporting Education &amp; Community Development

Currently in its fourth year in Malaysia, the Hewitt study was opened for participation in July last year; the survey was conducted between 1 September and 21 November 2008. The study was previously held in 2001, 2003 and 2005. The BEM study involved three surveys of each participating organisation: the CEO/ Most Senior Executive Questionnaire, People Practices Inventory and Employee Opinion Survey. Hewitt would then visit the organisations for face-to-face interviews with top management and employees as well as to verify data from the surveys. The shortlisted companies were chosen by an independent judging panel on 14 January 2009.

## PUBLICATIONS

Education remains a top priority at our organisation, and one of the best ways we demonstrate this is through our endorsement of several international publications, and contributions to independent publications, meant to advance the awareness of sustainability and climate change in our nation and globally.

More information on our publications are available at [www.ytlcommunity.com/climatechange](http://www.ytlcommunity.com/climatechange).

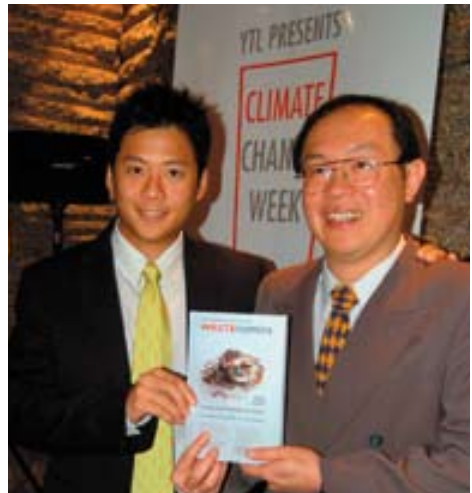
*Cut Carbon, Grow Profits*

Co-editors of *Cut Carbon, Grow Profits*: Dr. Kenny Tang (CFA) and Ruth Yeoh, Director of Investments at YTL Corp.

Launched during YTL's first Climate Change Week in 2007, *Cut Carbon, Grow Profits: Business Strategies for Managing Climate Change and Sustainability*, co-edited by Dr. Kenny Tang (CFA) and Ruth Yeoh, Director of Investments at YTL Corp, illustrates what every corporation needs to know in order to manage the carbon and sustainability challenges facing societies, cities, individuals and businesses today. With contributions from international experts, the book shows the benefits of incorporating strategic aspects of carbon thinking into the business strategies of companies, their customers and suppliers.

The book is essential reading for business executives at every level and contains forewords from Malaysia's Prime Minister, Dato' Seri Abdullah Ahmad Badawi, UK Foreign Secretary Margaret Beckett, UK Conservative Leader David Cameron, and Virgin boss Sir Richard Branson, among others. YTL Corp's Managing Director Tan Sri Dato (Dr) Francis Yeoh contributed to the postword of the book. The book brings together specific examples and case studies taken from cutting-edge international companies in a variety of sectors, including: YTL, Siemens, The Climate Group, Forum for the Future, London Climate Agency, Global Action Plan, World Resources Institute, Ceres (USA), BT plc, Ford Motor Co., Lloyd's, Arup, and Ernst & Young LLP.

Further to the launch of the book and post-Climate Change Week, *Cut Carbon, Grow Profits* books were donated to the libraries of several national and international universities in Asia and worldwide, in a conscious effort to contribute resources to the educational sector to open up knowledge of the growing importance of climate change and its available solutions.

*WASTEnomics*

Jacob Yeoh, Executive Director of SPYTL, and Dr. Kenny Tang at the media preview of *WASTEnomics*.

During YTL's second Climate Change Week in 2008, the book "WASTEnomics – turning waste liabilities into assets" was launched, illustrating what every responsible corporation needs to know in order to manage the waste, resource and sustainability challenges facing our planet today. Co-edited by Dr.

Kenny Tang of WASTEnomics Capital and Jacob Yeoh, Executive Director at SPYTL, *WASTEnomics* provides strategic insights into product and process innovation to minimise waste and turn the liabilities of waste into assets. The contributors are key players who are driving important changes in the business models of their sectors and re-writing the rules of competition.

The principles outlined in *WASTEnomics* intends to revolutionise the way individuals view ownership of their waste and responsibility towards sustainable production and consumption. It is essential reading for business, finance and investment executives at every level. Furthermore, it provides a strategic framework for the individual, business, investor and government to deal innovatively with the issue of waste and the use of our planet's resources.

### *Corporate Responsibility Guide for Busy Managers*

YTL contributed a chapter on sustainable practices for the ACCA-BCSDM-Shell publication entitled "Corporate Responsibility Guide for Busy Managers", jointly launched in 2008 by the ACCA, The Business Council for Sustainable Development in Malaysia (BCSDM), Shell Malaysia and CSR Asia.

The guidebook is a collection of case studies on leading companies and promotes greater awareness of corporate responsibility. It aims to encourage more corporations and managers to practice good and sustainable business. Designed to be an easy to read format, it is a good reference point for those wanting to know more on how to integrate sustainability practices into their organisations.





# PROTECTION OF THE ENVIRONMENT



"Our generation is facing one of the greatest challenges of modern times – climate change – and with it chronic food, energy and water security issues, not to mention the mass extinction of species due to human folly. Nevertheless, let us recognise that this same challenge is also the greatest opportunity for our generation. We can be the ones who turn the tide against climate change, and prevent the thoughtless and irreversible extinction of thousands of species, which eventually will include humans as well."

**Tan Sri Dato' (Dr) Francis Yeoh Sock Ping** CBE, FICE  
*Managing Director of YTL Corporation Berhad*

## Environmental Responsibility

### The YTL Group's Environmental Vision

We are fully committed to being a responsible corporate citizen. Energy plays an essential role in ensuring quality of life for people everywhere, for us and for future generations. Supplying energy efficiently is critical to helping people maintain and improve their standard of living. However, this brings with it significant challenges – for example, the very real threat of climate change means that we need to continue to provide and deliver energy in a way that minimises the impact our emissions have on the environment. We recognise the importance of sustainable development, setting targets to reduce the carbon footprint of our operations on society and understanding the dire consequences of global warming.

### ENVIRONMENTAL DIVISION: INVESTING IN THE FUTURE

YTL expanded its Environmental Investment Division in 2007. It engages in five key investment activities:

- Researching and investing in the YTL Group's companies and projects to improve energy efficiency, environmental responsibility and overall sustainability
  - Developing our carbon credit consultancy business (YTL-SV Carbon) and advising on clean development mechanism (CDM) and carbon emissions reduction (CER) projects both internally and externally
  - Encouraging the public and youth to learn more about global warming and climate change through organising YTL's flagship *Climate Change Week* educational campaign yearly
  - Supporting NGOs, Non-Profit Organisations and privately funded organisations for environmental advocacy, awareness, and mitigation and preventative activities
  - Investing at venture capital or mezzanine level in environmentally themed companies, projects and product development companies, including water treatment and supply, alternative and renewable energy, municipal solid waste to energy, agricultural waste, biomass energy, and other clean energy technologies, YTL Corp has also seeded three specialty investment funds managed by third party professional asset managers:
1. Asian Renewable Energy & Environment Fund (AREEF) – YTL seeded AREEF in early 2007, a Ringgit Malaysia denominated fund investing in listed Asian companies engaged in value chain of renewable energy and environment activities. The fund invests in upstream raw materials, plantation companies
  2. Renewable Energy & Environment Fund (REEF) – YTL seeded REEF in early 2008, a USD denominated fund also investing in listed companies but with a global reach

and equipment manufacturers, mid stream ECP companies, operators of renewable energy BOT and TOT projects, integrated water treatment companies, and environmentally-sound companies

We continue to do our part to help YTL achieve carbon neutrality through researching ways on how to minimise our overall carbon footprint, and through our investments in sustainability, clean technology and renewable energy.

### ENERGY SAVING AND SUSTAINABILITY PLANNING

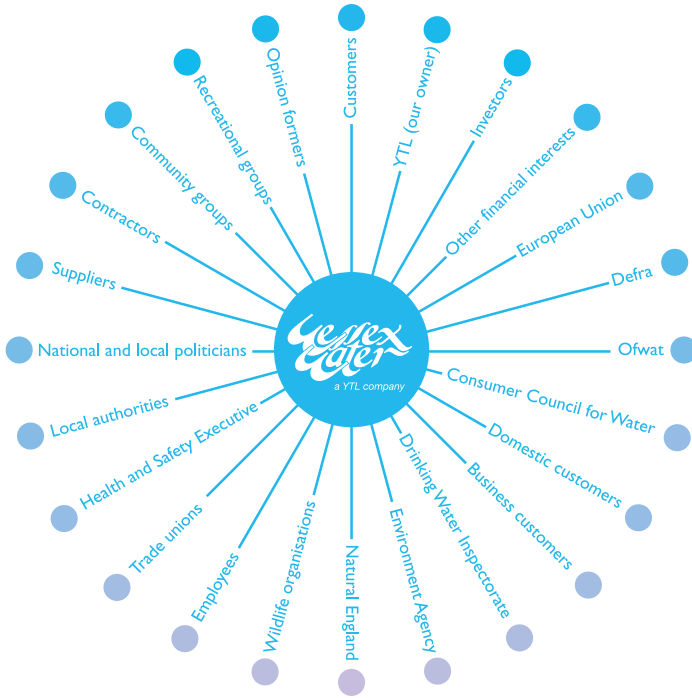
Over time, business success will depend on how we use and invest in environmental, social and manufactured resources. At YTL, we have set goals to reduce the impact of our utilities on our environment, through innovative methods such as energy saving schemes and sustainable planning measures.

#### Water & Sewerage Services



*"The basic meaning of sustainability – the ability to continue – seems simple. However, it's a hugely significant idea because true sustainability needs economic progress, environmental protection and the well-being of people to be successfully balanced. This is not something that society has achieved in the past."*  
– Wessex Water website

Wessex Water, our subsidiary in the UK, aims to be a genuinely sustainable company. In 1996, Wessex Water committed itself to becoming a sustainable water company and since then, it has experienced at first hand some of the business reasons for putting sustainability principles into practice. These include the services to society and the environment that make up its operating license, the growth of environmental taxation, the interest that employees have in being part of a business that takes sustainability issues seriously, the accountability demanded by all its stakeholders and the priorities of ethical investors when the company was listed. It considers sustainable



Source: Wessex Water, *Striking the Balance Report*.

development to be a set of activities that help society move towards sustainability. For Wessex Water to be sustainable, its work must therefore be compatible with the things that keep it going and are central to people's quality of life. For example:

- products from the environment such as water
- services provided by the environment, such as absorption of cleaned effluent
- the goodwill of customers and other outside interests
- the knowledge, welfare and motivation of their staff
- the condition of their infrastructure
- their finances

In 2008, Wessex Water became the first water company to receive the *Queen's Award for Enterprise in the Sustainable Development* category. This was in recognition of their approach to working in ways that were environmentally, socially and economically responsible and their partnership work with stakeholders.

**Key areas of success included:**

- increasing its generation of renewable energy
- implementing "Assist", an innovative, lower tariff
- building a sustainable operations centre
- working with farmers to help them reduce the use of nitrates and pesticides
- an ongoing education programme to aid the teaching of the water cycle and water conservation within the UK national curriculum



Photo: Wessex Water executive chairman Colin Skellett receives the Queen's Award for Enterprise from Lady Elizabeth Gass.

In 2003, Wessex Water became a signatory of the UN Global Compact which sought to advance responsible action by business, centred around nine principles covering human rights, labour standards and the environment. The Global Compact is a voluntary initiative relying on accountability and transparency – There are 37 signatories in the UK of which Wessex Water was the first water company. The company is also instrumental in enabling the city of Bath to commit to the Compact.

Wessex Water operates under a stringent set of environmental directives and regulations in line with its key long term goal of becoming a sustainable water company. The company's comprehensive programme to achieve this goal has ensured that all compliance rates for drinking water, sewage treatment and bathing water have not only been met but are among the best in the United Kingdom.

Wessex Water is currently recognised by the water industry regulator, Ofwat, as the most efficient operator in England and Wales. Advanced treatment techniques, automation, state-of-the-art control and monitoring systems ensure consistently high standards at a low cost. The company has a high 99.93% compliance rate in accordance with EU standards and has adopted the ISO 9000 quality assurance for its water production and control systems. In terms of sewage treatment standards, the company has obtained greater than 99% compliance with discharge standards and almost 100% compliance with bathing water standards, as well as maintaining some of the best rivers and bathing waters in the country.

Reports are made to subsidiary level boards and communicated up to the company's Board. The Board of Wessex Water Services Ltd (WWSL) includes a Director of Compliance and Sustainability.

It can be observed that water companies in the UK readily incorporate corporate social responsibility (CSR), and environmental and social reporting, through a mixture of legislation, regulation and good practice. They are leading the way in the utilities industry through their responsible action. Because water is such a necessary commodity, CSR was placed on the agenda to give fair returns to owners and stakeholders, on top of regulation. Wessex Water's company's approach to CSR covers these four key areas:

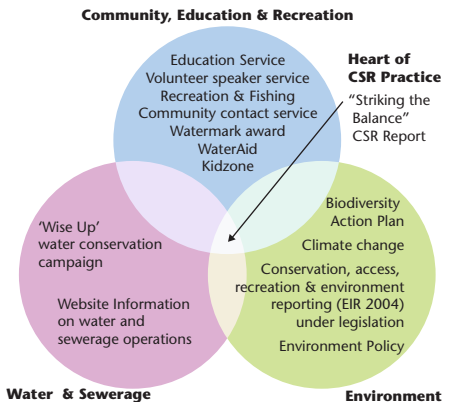
- Investing in the community
- Promoting health and safety
- Working towards sustainability
- Empowering employees

The company has developed numerous CSR, environmental and sustainability initiatives as outlined in the diagram. Here, the programmes often overlap with each other and work together to incorporate wider issues:

• **Wessex Water's CSR Engagement Programmes**

Its progress has been helped by its links with *Forum for the Future*, a sustainable development charity whose work with business partners shows how sustainable development is of critical importance in the private sector. Wessex Water also has a Sustainability Panel that meets three times a year, chaired by Jonathon Porritt CBE, a non-executive director who is currently chairman of the *UK Sustainable Development Commission* and Founder Director of *Forum for the Future*.

For Wessex Water, it is clear that a water company can not be sustainable on its own. Regulators, the Government, customers, interests groups and indeed all stakeholders, have a part to play.





Wessex Water publishes a yearly Sustainability Report reporting on environmental indicators and sustainability issues. The company also publishes Sustainability Discussion Papers regularly which is in effect a dialogue on the growing importance of sustainability. Wessex Water's *Striking the Balance* report, which provides a wealth of information on these important areas, can be accessed at [www.wessexwater.co.uk/uploadedFiles/pdf\\_leaflets/Strikingthebalance09.pdf](http://www.wessexwater.co.uk/uploadedFiles/pdf_leaflets/Strikingthebalance09.pdf). Last year, the company also produced a separate 'Conservation, Access and Recreation' report which builds on information contained within *Striking the Balance 2009*.

Some of our key goals, recent successes and ongoing challenges

<p><b>CUSTOMER RELATIONS</b></p> <p>We aim to have the highest levels of customer service and satisfaction in our sector</p> <p>Successes of 2008-09:</p> <ul style="list-style-type: none"> <li>• topping Ofwat's telephone satisfaction survey</li> <li>• 96% of customers who contacted us rated our service as either good or very good</li> </ul> <p>Challenges:</p> <ul style="list-style-type: none"> <li>• keeping bills affordable despite increasing regulatory pressures and treatment standards</li> </ul>	<p><b>STAFF SAFETY, SKILLS AND KNOWLEDGE</b></p> <p>We aim to provide a safe working environment for our staff and maintaining appropriate levels of skills, competencies and awareness of sustainable development to create a more sustainable business</p> <p>Successes of 2008-09:</p> <ul style="list-style-type: none"> <li>• our first staff awards evening to recognise the initiatives and exceptional performance of our employees</li> <li>• receiving a number of awards as a result of our work, including the government standard Customer Service Excellence award and the Queen's Award for Enterprise in the Sustainable Development category (the first water company to do so in both cases)</li> </ul> <p>Challenges:</p> <ul style="list-style-type: none"> <li>• ensuring staff are upskilled to match technical advances and innovation within the sector</li> </ul>
<p><b>DRINKING WATER QUALITY AND SECURITY OF SUPPLY</b></p> <p>We aim to provide the highest quality drinking water and sewerage services that support the health and wellbeing of society and meet demands without unexpected interruption</p> <p>Successes of 2008-09:</p> <ul style="list-style-type: none"> <li>• commissioning the new water treatment works at Maundown, our largest supply works, to provide improved drinking water quality and supply capacity</li> <li>• improving the resilience of our asset network, in particular reducing the number of customers served by single sources and further cutting those at risk of sewage flooding</li> </ul> <p>Challenges:</p> <ul style="list-style-type: none"> <li>• managing water resources under pressure against changes in demand patterns and climate</li> </ul>	<p><b>MANAGING OUR INFRASTRUCTURE</b></p> <p>We aim to manage our assets appropriately and be in a position to adapt to weather events, eg, caused by climate change, without harming levels of service and standards</p> <p>Successes of 2008-09:</p> <ul style="list-style-type: none"> <li>• achieving our highest ever Operational Performance Assessment (OPA) score of 428 points, 98% of the maximum and above our current target of 95%</li> <li>• holding leakage at 72MI/d, 2MI/d below our target level of 74MI/d, despite the coldest winter in 15 years which led to a major increase in bursts</li> <li>• completing our sewer tunnelling project in Bristol to reduce the risk of sewer flooding</li> <li>• remaining the only UK water company to have achieved accreditation to PAS55, the internationally recognised standard for asset management</li> </ul> <p>Challenges:</p> <ul style="list-style-type: none"> <li>• managing our existing and future assets and associated works in the most sustainable way, eg, to give preference to 'soft engineering' over material intensive alternatives</li> </ul>
<p><b>ENVIRONMENTAL QUALITY</b></p> <p>We aim to appropriately treat sewage and sludge so that it can safely be returned to the environment, work with others to have a biodiversity rich landholding and contribute to the biodiversity of the Wessex Water region</p> <p>Successes of 2008-09:</p> <ul style="list-style-type: none"> <li>• achieving 100% compliance with mandatory bathing water standards five years in a row</li> <li>• achieving a 36% reduction in pollution incidents from 2007 and having no serious category 1 or 2 incidents for the first time</li> <li>• achieving 91% compliance of SSSI sites in our landholding in favourable or recovering condition, moving us closer to the 2010 target of 95%</li> </ul> <p>Challenges:</p> <ul style="list-style-type: none"> <li>• coping with changing weather patterns and population demands</li> </ul>	<p><b>FINANCES</b></p> <p>We aim to maintain a robust balance sheet and long term stable relationships with shareholders and creditors who share the company's commitment to sustainability</p> <p>Successes of 2008-09:</p> <ul style="list-style-type: none"> <li>• consulting customers on their aspirations for the 2009 Price Review and final business plan, setting out how we will deliver those aspirations in a long-term, sustainable context</li> </ul> <p>Challenges:</p> <ul style="list-style-type: none"> <li>• dealing with the effect of recession and the rising cost of raising new finance and ensuring we can fund required improvements without sharp rises in future customer bills</li> <li>• managing the burden of customer debt</li> </ul>
<p><b>MANAGING OUR GREENHOUSE GAS EMISSIONS</b></p> <p>We aim to reach carbon neutrality by 2020, with an active programme to ensure that energy is used efficiently to minimise consumption. This includes increasing our own generation of renewable energy and taking 50% of our energy from all renewable sources by 2020, with an overall future target of 100%</p> <p>Successes of 2008-09:</p> <ul style="list-style-type: none"> <li>• winning the SouthWest C+ Carbon Positive Award in the Carbon Positive Footprints category for managing our carbon footprint</li> <li>• Obtaining planning permission for four wind turbines</li> </ul> <p>Challenges:</p> <ul style="list-style-type: none"> <li>• tightening environmental standards resulting in increasing chemical and energy use, and sludge production</li> </ul>	

Source: Wessex Water "Striking the Balance 2009" Report.

At the same time, the company continued to grow through its investment to meet new customer, quality and environmental standards. Overall, it has been a good year for Wessex Water, having achieved higher levels of efficiency and customer service, maintaining high levels of compliance with water quality standards and sewage discharge consents and carrying out environmental improvement work, as well as receiving many significant awards in the process.

Further details and information are available on [www.wessexwater.co.uk/sustainability](http://www.wessexwater.co.uk/sustainability).

### Power Generation & Transmission

Environmental protection has been at the forefront of our planning from our first foray into utilities businesses. YTL Power has been instrumental in changing the Malaysian Government's policy to use clean fuel like natural gas instead of sticking to their four fuel policy which includes abundant use of coal and crude oil.

YTL Power was the first Independent Power Producer in Malaysia and we were very careful from the outset that our gas fuelled combined cycle power plants would not cause environmental damage. The potential damage involves the emissions of nitrogen dioxide (NOx) into the atmosphere and the discharge of hot water back into the sea. The Paka Power Station is designed to minimise these emissions.

The water cooling system uses submarine pipes laid out into the sea at different distances to carry cold sea water into the station and hot water out into the sea. This design has minimised hot water recirculation and we further ensured that the elevated sea water temperature would have a minimum impact on marine life by extending the length of the hot water discharge pipes by 10% further than required in the engineering by-laws.

- ***Paka and Pasir Gudang Power Stations (Malaysia)***

Our power stations in *Paka* and *Pasir Gudang* are designed to comply with Malaysian environmental quality regulations with regard to emissions. These plants incorporate a range of measures to eliminate or reduce operational releases, including oil interceptors fitted to the site drainage systems and effluent treatment facilities to treat waste water prior to discharge. Another specific design

feature is the burners of the gas turbines. These gas burners produce very low NOx levels during operation and thus help to mitigate the amount of emissions into the atmosphere. The NOx emission levels achieved are well within World Bank standards.

YTL's Paka and Pasir Gudang stations' efforts in reducing water consumption in both power plants have also shown excellent results. The biggest savings came through stopping the continuous blowdown on the heat-recovery boilers, except when necessary. Secondly, there was a concentrated effort to decrease or eliminate the number of valves on the water-steam systems to reduce water wastage.

Between 2000 and 2003, demineralised water consumption was halved in both Paka and Pasir Gudang. Since then, the annual consumption has remained relatively stable.

In September 2007, YTL Power scored highly in CLSA's *Corporate Governance Watch 2007*, an annual review of the corporate governance practices of Malaysian corporates. YTL Power was ranked No.1 in terms of "Clean & Green" scoring in Malaysia, with an overall score of 55%.

- ***PT Jawa Power Station (Indonesia)***

Our 35%-associate, P.T. **Jawa Power** in Indonesia, has received ISO14001 certification for *Environmental Management Systems* for its 1,220 MW power station and we are currently pursuing this for our Malaysian power stations as well.

Jawa Power remains the only Indonesian energy company to receive a *Green Rating* under the government's Environmental Training Programme and has been awarded this rating for the 3rd consecutive year by the Indonesian Ministry of Environment under its *Environmental Rating Programme* (PROPER) for 2006-2007. The Green Rating indicates that the company has implemented effective pollution control programs and has successfully exceeded the requirements of environmental laws and regulations. It is awarded to those which, in addition to 100% compliance with the laws and legislations, demonstrate good efforts in community development or Corporate Social Responsibility (CSR).

- **ElectraNet (Australia)**

YTL Power's *ElectraNet* operation in Australia operates in line with a Code of Sustainable Practice. Its environmental policy provides a framework to ensure that environmental considerations are included in the planning, design and construction and operational phases of all business activities.

The business is also pro-active in its general environmental responsibilities and conducts environmental audits on its substations and equipment on a regular basis. Amongst other initiatives, the Australian Federal Government's Greenhouse Challenge programme and Aboriginal Heritage issues are key considerations in *ElectraNet's* drive to maintain sound management practices and procedures.

*ElectraNet's* procedures and systems for the management of potential environmental impacts are incorporated in the company's guide, accessible on their website: [www.electranet.com.au](http://www.electranet.com.au).

- **PowerSeraya (Singapore)**

*Energy Efficiency with IT*

Headquartered in Singapore, PowerSeraya's business is centered on electricity wholesaling and retailing. PowerSeraya is, however, fast becoming a leading integrated energy company in the region. The organisation provides utilities services such as electricity, steam and cooling water. It engages in oil trading and produces water using its own reverse osmosis desalination plant. PowerSeraya operates one datacenter from its headquarters at HarbourFront in southern Singapore and a second center at oil, gas and petrochemical hub Jurong Island. Each facility operates as a primary datacenter and provides secondary/disaster recovery support for the other.

In 2005, PowerSeraya forecast growth in server numbers from 15 to in excess of 70 by 2007. The organisation's IT infrastructure team immediately focused on identifying and evaluating effective physical server consolidation strategies. Facing increasing demand for server resources and wanting to reduce its environmental footprint, PowerSeraya needed a cost-effective infrastructure that could support green programs, contain server sprawl, increase IT resource utilisation and help allocate computing resources quickly.

After conducting initial research and proof of concept work, PowerSeraya decided to use VMware as its platform to implement server virtualisation. While not all PowerSeraya production applications were certified to operate on the platform, the benefits of VMware outweighed any concerns and the organisation effectively mitigated a significant number of the risks. Most development, quality assurance and disaster recovery servers are hosted on VMware Infrastructure. As a result, virtualisation has presented the business with an opportunity to dramatically reduce wasted server hardware central processing unit cycles and memory.

PowerSeraya is currently running about 40 virtual machines on two physical servers with a total of six dual-core CPUs at the HarbourFront datacenter and about 20 virtual machines on two physical servers with a total of four dual-core CPUs at Jurong Island.

Deploying VMware across its data center infrastructure has enabled PowerSeraya to take steps towards greening its IT operations. By running 70 virtual servers on four physical hosts rather than the equivalent physical infrastructure, PowerSeraya has saved energy consumption and carbon emissions by an estimated 70 percent each. This translates to savings of about 26,000 kWh and 12.5 tonnes of carbon dioxide per year.

Other important results and successes include:

- Achievements of an equivalent server consolidation ratio of greater than 10:1
- Increased CPU utilisation from 3% on average to 20-50% over a 24 x 7 period
- Cut server deployment lead time from about four weeks to four hours, including antivirus and backup tasks
- Increased the productivity of the information technology team due to easier management of the PowerSeraya server infrastructure
- Enabled deployment of a dynamic infrastructure for less than half the capital required to deploy a physical infrastructure
- Reducing datacenter floor space and cooling requirements as fewer physical servers are required to operate the PowerSeraya environment

Improving energy efficiency and reducing its carbon footprint is not new to PowerSeraya as the organisation has **reduced its carbon emissions by 30 percent over the past decade.**

### Property Development

YTL Land & Development Berhad (YTL) was proclaimed as a leader in sustainability practices in the Malaysian property industry, according to a study done in 2008 by Professor Graeme Newell, professor of property investment at the School of Economics and Finance at the University of Western Sydney. Newell presented a paper entitled "The Significance of Sustainability Practices by Malaysian Property Companies" during the International Real Estate Research Symposium (IRERS) 2008 and focused his research on the top 30 property developers in the country, as ranked by *The Edge* Malaysia Top Property Developers Awards 2007. YTL was mentioned for having outstanding results and for being a total supporter of sustainability.

This brings us to our most extraordinary development in our group – our *Sentul Urban Revitalisation* scheme which saw an abandoned golf course transformed into a total green lifestyle concept development including a park, green homes, performing arts centre, koi farm and integration with the urban transportation system. To find out more about our Sentul Park development and the Kuala Lumpur Performance Arts (KLPac) centre, please visit [www.maple.com.my](http://www.maple.com.my) and [www.klpac.org](http://www.klpac.org).

The purpose behind Sentul East and West at Sentul Park was not only to renew its physical environment and wealth but also to renew its community, their access to local services and relationship with the area. Converting an abandoned golf course to a private-gated park was no easy task but the transformation of Sentul Park into a thriving park and community hub has seen the challenge bear fruit. In 2007, our *Sentul East & West* development won the International Real Estate Federation (FIABCI) Malaysia *Property Award for "Best Master Plan Development"*. The *Kuala Lumpur Performing Arts Centre (KLPac)* also won FIABCI Malaysia's Special Award for "National Contribution."

See [www.ytlcommunity.com/commnews/shownews.asp?newsid=33289](http://www.ytlcommunity.com/commnews/shownews.asp?newsid=33289) for more information.

We realise going green is a growing trend among homeowners and communities worldwide. So in our Sentul project, we made the decision to maintain a 35-acre green lung in the heart of Kuala Lumpur as a park for the use of our residents because we believe that this will enhance the quality of life of the people who buy our properties. We have adopted this philosophy throughout all our current residential property developments, such as Lake Edge in Puchong, Lake Fields in Sungei Besi and Pantai Hillpark. We have placed the focus on reducing the number of units in favour of maintaining a balance between nature and development, and have adopted building and design techniques that make the most of natural sunlight and improve airflow to reduce the need for artificial light and air-conditioners.

Both our SPYTL Design team and property development team have attended *Leadership in Energy and Environmental Design (LEED)* workshops in the past and are currently actively pursuing LEED certification and environmental surveillance for our future building projects. LEED programmes are sponsored by the US Green Building Council.

In the past, YTL has also been responsible for transforming the city landscape, planting trees in urban spaces and ultimately creating "*Bintang Walk*", a pedestrian and shopping stretch in Bukit Bintang, the heart of the city. Our *Starhill Gallery* and *Lot 10* shopping malls readily incorporate sustainable design elements into the buildings. Most notably, the special glazing and tent used for the atrium dome at Starhill Gallery was fitted to minimise heat loss and reduce chiller requirements, thus increasing energy efficiency. YTL's Environmental Division is also researching air-conditioning & lighting energy saving devices, and meeting with energy saving experts to see if energy saving products can be fitted for common areas of our properties and developments.

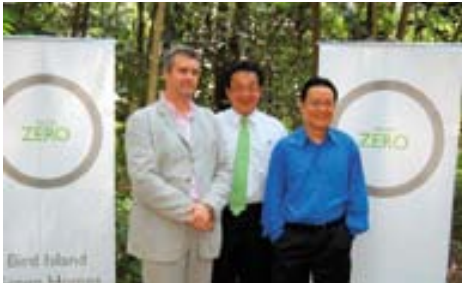
Visit [www.starhillgallery.com](http://www.starhillgallery.com) and [www.lot10.com.my](http://www.lot10.com.my) for more information on these properties.

Our upcoming luxury villa developments in Asia's premier integrated marina community, **Sentosa Cove of Singapore**, will also testify towards our faith in sustainable architecture and design. Designed by world celebrated architect, Claudio Silvestrin, the villas at Sandy Island are surrounded by lush greenery and landscaping shaped by multi-award winning Australian landscape designer, Jamie Drurie.

This year, Sandy Island won two prestigious CNBC Asia Pacific Residential Property Awards for "Best Development Singapore" and "Best Development Marketing Asia Pacific". More information on our green luxury development is available at [www.sandyisland.com.sg](http://www.sandyisland.com.sg).



*The Sandy Island Villas surrounded by lush greenery at Sentosa Cove.*

*The Bird Island Green Homes Competition*

(L-R) Stephen Pimbley, Tan Sri (Dr.) Francis Yeoh and Dato' Yeoh Seok Kian at the Launch of The Bird Island Green Homes "Seeking Zero" Competition.



Green Home Prototype or Bird Island designed by Graft Lab Architects.

On July 2007, YTL Land & Development launched the *Bird Island Green Homes Competition*, the first 'green' architectural competition of its kind in the world, stemming from the recognition that energy-efficient buildings are the future of sustainable architecture and building design.

"Seeking Zero" is the aim of the project, calling for designers and everyone to play their part for a more sustainable society through striving for zero energy emissions. While achieving zero energy emissions might seem impossible, the ambition is that society would make a conscious effort to consume less and be more efficient with our environment's limited resources.

For the competition, YTL Land has partnered with Stephen Pimbley, partner at SMC Alsop, one of the UK's leading international award-winning architectural practices, who will serve as Master Planner & Project Advisor of the competition. The competition brings together eight of the world's leading names in architecture and environmental engineering, who are vying for the opportunity to design six eco-friendly homes on Bird Island, a green haven located in the 35-acre Sentul Park, part of YTL Land's iconic urban renewal development in Sentul. The three-acre Bird Island site has been divided into six plots, each with a notional area ranging from 385 to 516 sq.m., with each team submitting two designs for a three-bedroom villa, in accordance with designated requirements and criteria.

Hailing from all over the globe, the participating architects, are Atelier Ten (UK), Grant Associates (UK), GRAFT (Germany), Innovarchi (Australia), KplusK Associates (Hong Kong), MAD (China), Plasma Studio (UK), and Zoka Zola (USA).

Judging took place on September 2007 and the winning designs will be announced later on in the year. Visit [www.birdisland.com.my](http://www.birdisland.com.my) for more information.

*Hotel Development & Management*

At our Pangkor Laut Resort and both our Ritz-Carlton Hotel and Ritz-Carlton Residences in Kuala Lumpur, "Green Meetings" are held frequently with senior managers to exchange ideas on "green operations" which are in-line with YTL's serious efforts in creating sustainable environments.

At Pangkor Laut resort, ongoing efforts are being made to assess composting equipment for Pangkor Laut Resort's kitchen waste. Upgrades of the resort's boat vessels' are also in progress. Here, vessels with two-stroke engines are assessed and tuned up by our boat engineers to improve the efficiency of the boats and to minimise wasted oil and effluent into the seas.

The Ritz-Carlton Green Meeting's vision is to develop a brand-wide green meetings initiative that is adoptable regardless of hotel age, layout, architecture or location. The objectives of these meetings are to:

- Minimise the environmental footprint of each hotel's group and catered event activity
- Reduce event resource consumption by hotel and group clients
- Adjust hotel procurement Local Services Ordering and Provisioning Committees (LSOPs) to include sustainability criteria
- Conserve water and energy while still protecting the group luxury experience
- Reduce pollution and water generated by group and catering events
- Utilise meeting by-products to broaden local Community Footprints outreach

### Express Rail Link



YTL Corp is a major shareholder of Express Rail Link Sdn Bhd (ERLSB), a railway development company which was awarded a concession on 25 August 1997 to finance, design, construct, operate and maintain the KLIA Ekspres, KLIA Transit and other ancillary activities related to railway services.

The ERL/CRS system is a modern electrical rail system, operating between Kuala Lumpur Sentral Station and Kuala Lumpur International Airport. The trains' operation and maintenance is efficiently managed by ERLSB's wholly owned subsidiary, ERL Maintenance Support Sdn Bhd (E-MAS). E-MAS recognises the need to be as environmentally friendly as possible and as a company, is looking into a number of initiatives to improve the environmental impact of their business activities. E-MAS is entrusted with the responsibility to provide environment-friendly high speed rail services on a day-to-day basis to, and from, the airport and city, besides ensuring that these services are safe, reliable and economical.

The fleet therefore consists of twelve state of the art, high speed trains which have no direct emissions of pollutants and have "built in" energy savings by design. E-MAS acknowledges that environment friendliness does not end with the trains. There is an Energy Saving Programme for trains that was implemented in 2003. Drivers were trained to operate the trains using energy saving techniques, which EMAS named the "MAKAN" principle:

- Make sure that trains are switched off during stabling
- As much driving as possible in coasting mode
- Know to brake early and with not more than 40% braking force
- As much as possible using the electrical brake
- No traction effort more than 80%

With this programme, E-MAS was able to reduce the energy cost per trip from RM65.59 in 2003 to RM62.11 in 2005, translating into a total saving of approximately RM300,000 for the year 2005. In 2006, E-MAS's target is to reach an energy cost per trip of RM67, despite the 12% increase of electricity cost in June 2006. E-MAS also launched a Building Facilities Energy Saving Programme, with targets to achieve savings of energy costs of RM100,000 per year by modifying the existing installations. The objective for this project was to reduce building facilities power supply consumption. The project had to be done at the most minimal modification cost without affecting daily operation standards. Results were therefore achieved by introducing the following steps:

- Reduce amount of lighting in an area with new lighting arrangements
- Reduce time of operation – for lighting and air conditioning system, controlled by timer
- Switching to energy saving lighting without affecting existing designed brightness

In 2008, further energy saving measures were implemented and are tabled as follows:

**Expected Annual Savings**

Estimated Savings Train Operation	:	RM375,000
Estimated Savings Workshop, Buildings, Maintenance	:	RM443,000
Total Savings	:	RM818,000 per year

E-MAS' calculations have shown that the total expected annual savings per year (in ringgit) will be a total of RM818,000. E-MAS also distributes an e-newsletter highlighting energy efficiency issues, as well as ideas on energy conservation to encourage and continue dialogue in this growing area of importance.

KLIA Ekspres also recently launched a "GO LO-CO<sub>2</sub>" Campaign to encourage the public to take the trains (as opposed to other forms of transport) to the airport, thereby saving carbon emissions. Rail transport is currently considered one of the most energy efficient modes of transport and Greenhouse gas emissions per passenger kilometre for rail transport is up to five times less than that of car transport.

Visit [www.kliaekspres.com/erlsb/Home/ERLGoesGreen/tabid/195/Default.aspx](http://www.kliaekspres.com/erlsb/Home/ERLGoesGreen/tabid/195/Default.aspx) for more information and details on their latest environmental campaign.

**WASTE MANAGEMENT**

At YTL, recycling is mainly carried out in our offices, as well as the power, construction, cement and hotels and resorts divisions. Overall, there is some recovery of non-organic matter such as plastics, metals, paper/board products, cans, glass and wood, which are then sent to the respective channels for further recycling processing after sorting on-site.

Our in-house recycling programme at the YTL Building recycles paper waste. The programme was implemented by the Human Resources and Environmental Division and has been very successful with the 'cash from trash' collected by our 'recycling rangers' stored for use as an emergency fund for the poor, needy, disaster relief, and other charities.

At YTL's Hotels and Resorts, inedible food waste in the resorts is currently being sent for incineration but there are plans to install composting systems which would break down the organic matter and result in the production of organic fertilizer on-site at each resort which can be used in the forests or planted and tended landscaped areas.

YTL Cement, YTL Power's 35%-associate PT Jawa Power, and other companies in the Group have attained ISO 14001 accreditation. YTL Power's stations in Paka and Pasir Gudang are designed to comply with the Malaysian environmental quality regulations with regard to emissions. They incorporate a range of measures to reduce operational releases, including oil interceptors fitted to the site drainage systems and effluent treatment facilities to treat wastewater prior to discharge. Similarly, the gas turbines are produce very low NOx levels during operation and thus help to mitigate the amount of emissions into the atmosphere. The 35%-associate PT Jawa Power in Indonesia generates about 400mt of ash per day, the bulk of which is fly ash. This is separated from the boiler ash by electrostatic precipitators.

Traditional disposal would be to convert it into slurry and pump into specially-built ash lagoons. In 2003, however, Jawa Power began sending its fly ash to a nearby cement processing plant. Fly ash reduces the cost of manufacturing concrete as it is only mixed with the cement in the final stages of production, making it an inexpensive replacement for cement used in concrete. The fly ash also improves the strength of the final product. The cement plant invested in additional facilities to enable it to use Jawa Power's fly ash, resulting in the utilisation rate of Jawa Power increasing from 26% in 2003 to 78% in 2006.

Industrial waste from YTL Cement is largely fly ash, kiln dust, lubricants, kiln bricks, concrete wash water and air-borne particulates. Whatever kiln dust or air borne particulates generated by the cement-making process in YTL Cement (collected with fabric filters or electrostatic precipitators) are returned to the system. YTL's cement plants are designed to do this. All waste materials are sent for recycling where possible and YTL Cement is ISO 14001 compliant.

Currently, YTL's better quality recoverable construction waste is sorted and sent to specific recycling centres. The most important step for recycling of construction waste is on-site separation. Initially, this will take some extra effort and training of construction personnel. Once separation habits are established, on-site separation can be done at little or no additional cost.



Potential construction waste from our newly acquired 30 year old, 50-unit Westwood Apartments in Singapore will be an important example of how we treat construction waste in the process of remodelling or demolition when the building is either remodelled or pulled down and replaced by 20 storeys comprising 43 units of 4,000sf luxury condominium apartments. Notably, Singapore has a number of licensed waste recycling centres in Kranji and Jurong where steel, wood, plastics and glass can be sent and disposed of for a fee.

### PT YTL Jawa Timur (Indonesia)

#### Composting of Organic Waste

At YTL Power's PT YTL Jawa Timur plant in Indonesia, composting organic waste is encouraged. An Operator Housing Complex (OHC) is located around 7km from the power station and around 150 of the plant's staff are living in this OHC along with their families. About 1 tonne waste per day is generated by the OHC and 60% of them are organic wastes. Previously, the waste was brought to a dedicated landfill.

PT YTL Jawa Timur aims to change the paradigm so that the Final Disposal Area is to be converted to become Processing Area. The company built an Integrated Waste Management area in which local communities participated in the land provision of 14,000 m<sup>2</sup>. Non organic wastes from OHC, which could be recycled such as plastics, papers, metals and rubbers were segregated, collected, and delivered to potential recycling companies. Organic wastes were also separated from non organic wastes and turn into compost to be used as soil conditioners (fertilizer). It is expected the compost could reduce the use of chemical fertilizer.



Photo: Organic Compost produced from organic waste.



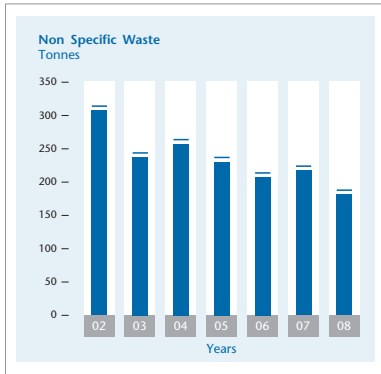
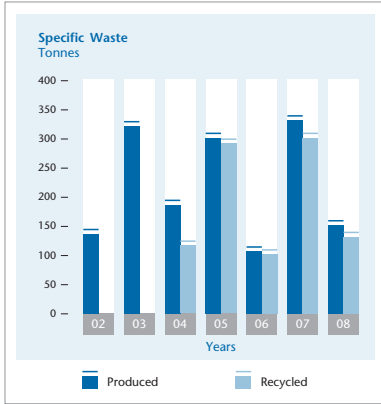
Photo: Organic waste being turned into compost.

With respect to the global warming, composting of organic waste will avoid methane release that occurs if the waste is disposed to open landfill area. Methane is a greenhouse gas which has a global warming impact 21 times that of carbon dioxide.

PT YTL Jawa Timur's environmental policy statement also endorses an effective waste management system that encourages a "Reduce, Reuse and Recycle" concept, including for hazardous waste types. Fly ash, as the biggest amount of byproduct waste is consistently delivered and reused at cement, ready mix, and construction companies. In 2008, the power station generated 128,569 tons of Fly Ash and only less than 1.5% was discharged to an ash disposal area. As a result, more than 98.5% of Jawa Power fly ash was re-used.

Other specific wastes, which are classified as hazardous waste – such as chemical laboratory waste, contaminated waste, fluorescent lighting and MMMF – are disposed to an approved government disposal company. However, and whenever possible, waste such as wastewater treatment plant sludge, used oil, used batteries, are all recycled.

The following figures describe the quantity of hazardous waste generated and the quantity that could be recycled:



General waste (non specific waste) has decreased, indicating the success of the waste management program.

**Ash Disposal Area goes Green**

More than 98.5% of fly ash is now transported to cement, ready mix, or construction companies. The ash disposal area becomes an idle area. After stabilisation works at its lagoon 1 finished, the company decided to make the pile of fly ash become green. Layers of top soil were placed to 'condition' the area – applied at the top of the ash layer, grass were also grown on top of this. Plans have already been discussed in the near future for the effluent of wastewater treatment plants to be used to water the grass on the topsoil.

*BEFORE  
Ash Disposal Area (original condition).*



*AFTER  
Transformed into a green space!*



## Power Generation

### *Paka and Pasir Gudang Plants (Malaysia)*

At our power stations in Paka and Pasir Gudang, we have employed the technology necessary to maintain the ambient temperature of the bodies of water that border the stations, thereby ensuring the sustainability of marine life in these areas.

Emissions of carbon dioxide (CO<sub>2</sub>) and nitrogen oxide (NO<sub>x</sub>) are monitored continuously using automated equipment. If levels of these contaminants rise above their normal levels, then steps are taken to correct the problems, since these changes are also an indication that the plant is not running at optimum conditions. Similarly, the temperature and chemical composition of liquids discharged to the marine environment are monitored regularly to ensure that the discharges will cause minimum disturbance to the marine ecosystems near to the plants. All of the emission levels are reported regularly to the Department of Environment.

### *PT YTL Jawa Timur Plant (Indonesia)*

At our 35%-associate P.T. Jawa Power plant in Indonesia, cooling water is abstracted from and returned to the Sea (Java Sea). Discharge water temperature and pH levels are continuously monitored by an online monitoring system. Any deviation from standards would be notified immediately for remedy action. Periodic water discharge sampling is also carried out monthly for all water discharge sources and a complete parameter analysis as prescribed in the regulation is conducted in accredited independent laboratories. All parameters are managed within regulation limits and Environmental Management & Monitoring is carried out consistently.

### *Seawater Condition*

Discharge water quality from the power stations are continuously monitored by an on-line monitoring system. Periodic water discharge sampling is also carried out monthly for all water discharge sources and a complete parameter analysis as prescribed in the regulation is conducted in an accredited independent laboratory. All parameters are managed within regulation limits.

A part of its Environmental Monitoring Plan under Environmental Impact Analysis (AMDAL) Documents, sea water biodata surveys of plankton, zoo plankton, macro zoo benthos, and coral reef, as well as sedimentation rates, are performed every 3 months.

After 10 years of the power plant being in operation, observations have shown that the seawater condition has been managed very well, with aquatic life continuing to thrive in the ocean's ecosystem. Jawa Power's staff also double up as volunteer divers to regularly survey the health and state of the reefs, respecting these sustainability programmes.



*Coral reef condition, measured by a diver, near the Coal pile.*



*Two Coral Massive (CM) between Acropora Tabulate (ACT), found near the Supporting Jetty.*



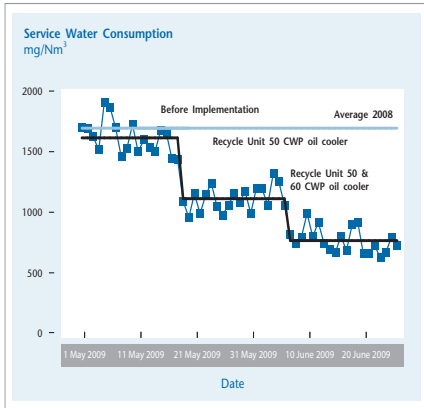
*Clown fish and anemone, found under a Supporting Jetty Facility at the PT Jawa plant in Indonesia, with photo taken by a staff at PT Jawa, Indonesia.*

**New and Existing Conservation and Biodiversity Initiatives also include the following:**

- ***Plant Water Conservation***

The commitment for water conservation as part of its natural conservation program is formally stated under the PT YTL Jawa Timur Environmental Policy statement. In 2009, the company endorsed a plant water conservation program. A brainstorming exercise between the Operation & Engineering departments with a strong management drive for optimisation of water has achieved significant reduction on service water consumption overall. Service water is vastly used in the plant for coal dust suppression system, plant cleaning, ash lagoon maintenance, equipment cooling systems, among others.

The following figures show current achievements of service water reduction which amounts to 700 m<sup>3</sup> per day. This directly decreased the operating cost of electrical power and chemicals equivalent to around USD\$75,000 per year.



Source: PT YTL Jawa Timur.

The added chemicals and electrical power savings also mean reductions in the overall impact of its activities to the environment.

Beside the service water, the plant has already optimised the demin water consumption by close monitoring of losses, optimisation of deaerator vent opening and continuous blow down operations. The team continues to identify, evaluate, and possibly further implement the opportunity for plant water conservation through its "Reduce-Reuse-Recycle" concept. There are some areas already identified for improvements and therefore it is expected in the future that water consumption figure would decrease further.

• **Fixed Dome Anaerobic Bio-digester**

As a continuation of its previous pilot scale program, a biogas facility for local cow farmers near the facility has been provided and is now in operation. The facility is designed to digest waste manure from 16 cows, and to generate biogas for 8 houses. The biogas produced will replace the use of woods and kerosene for cooking activities, beneficiary for the environment and in line with Indonesia's goal for conservation in local communities.

Based on statistical data, many of the local communities in the Paiton station consist of cow-farming activities. PT YTL Jawa Timur aims to enhance this initiative by planning to build more facilities of this sort in the future, so that the local community could gain real benefits from these projects. It is also intended to increase community awareness in respect to the waste utilisation around their locale. In term of global warming prevention, the biogas facility will avoid methane emissions to the atmosphere. Methane is a greenhouse gas which has a global warming impact 21 times that of carbon dioxide.



• **Green Campaign**

As part of its yearly programme (now in its second year), in 2009, PT Jawa conducted its "Green Campaign Programme". The campaign was timed in conjunction with "World Environmental Day" on 5th of June and carried out for a period of around 3 months.

The Campaign was also intended to increase awareness and participation of staff and their families with respect to environmental protection.

Among the programmes and activities pioneered this year were:

- A Waste management campaign
- An Electricity and water saving campaign
- An Environmental photo themed competition

This year, the Green Campaign also aimed to encourage schools in Indonesia's Probolinggo regency, to create better awareness on environmental care. PT YTL Jawa Timur, supported by the Probolinggo Environmental Office and the Probolinggo Educational Authorities, thus carried out a "School Waste Management Competition". Rewards were given in the form of school facility improvements for schools who demonstrated good improvements on waste management systems.

### Water and Sewerage Services

Wessex Water, our subsidiary in the UK, is located in an environmentally sensitive region that influences how it maintains and develops its assets. For example, there are more than 450 Sites of Special Scientific Interest (SSSIs), almost 7,000 county wildlife sites and more than 4,000 Scheduled Ancient Monuments within its area. It also has a high density of Natura 2000 sites, which represent the most important areas for biodiversity in Europe. These sites are legally protected and it is essential to take into account the impact of its activities upon them. Methods to advise this include:

- a site database highlighting sensitive sites
- an in-house environmental services team
- environmental method statements
- funding biodiversity projects through its Biodiversity Action Plan
- site environment plans illustrating extensive management requirements

### BIODIVERSITY

The Wessex Water Biodiversity Action Plan (WWBAP) was the first corporate BAP when published in 1998. The publication of the BAP followed a widespread period of increased awareness of the plight of biological diversity as a result of increased development and man's impact, following the Rio Earth Summit in 1992. This summit put biodiversity on the international stage and raised its profile in terms of international and national legislation. As a result the UK government launched the UKBAP in 1994, and the Wessex Water BAP builds on these principles within its operational region.

The WWBAP has three strands:

- minimising our impact on the environment
- conserving biodiversity within its landholding
- partners programme

The Wessex Chalk Streams Project is a good example of a project that Wessex Water supported throughout the 10 years of the WWBAP. Here, river restoration work aims to take the channel back to its natural form and provide improved biodiversity.



CHALK STREAMS PROJECT



1999

Wessex Chalk Streams Project launched: project officer appointed and steering group formed with representatives from Wiltshire Wildlife Trust, Wessex Water, Environment Agency, Natural England (formerly English Nature) and Wiltshire Fishery Association.



2001

To date: financial contributions towards five river restoration schemes, 16 site visits made with advice on river management, conservation and legislation given. Site management statements produced for three fly fishing clubs covering 18 miles of river.



2003

New project officer appointed. Three river enhancement projects completed during 2003 on the rivers Wylde, Bourne and Avon. Twenty one site visits made to fishing clubs and riparian owners.



2004

River enhancement demonstration day for river keepers. A bid was submitted to the Heritage Lottery Fund for a £1 million sister project called River Avon and Avon Valley Initiative (RAAVI), which encompasses the river from its source in Wiltshire to its mouth in Christchurch. Funding bid successful!



2005

The work of the Wessex Chalk Stream Project recognised the need for further dedicated work on the River Avon, which led to a further funding application. STREAM – Strategic Restoration and Management of the River Avon Special Area of Conservation (SAC) is a £1m project centred on the River Avon and Avon Valley in Wiltshire and Hampshire and supported financially by the EC LIFE Nature programme. The project began in 2005 and its key objectives include demonstrating and monitoring river restoration at six sites covering 7km, as well as holding a series of public open days to raise awareness of the river system in the local community. New project officer in place.



2006

To date: facilitated 34 river enhancement projects, 130 landowners visited and 300 site visits completed. Working with catchment sensitive farming initiative officers and Wiltshire Wildlife Trust's water vole recovery programme.

2007

To date: facilitated 35 river enhancement projects improving more than 13km of river, secured more than £140k in grant aid, 300 site visits completed with over 140 landowners visited to provide advice on sustainable riparian management. Launched non-native invasive plant strategy to target Himalayan balsam, Japanese knotweed and giant hogweed. Invasive plant conference hosted. Assisted with wider partnerships, eg, STREAM, RAAVI and Wessex Water low flows investigation.

Source: Photo courtesy of Wessex Water, with thanks to Martin De Retuerto, Wessex Chalk Streams Project.

Wessex is currently implementing an ecological survey programme of its key biodiversity assets in order to gauge the effectiveness of its conservation management. This involves a dedicated ecologist working on biodiversity management of its sites full time for 12 months. As a result of the survey programme, it has changed the frequency and method of its grassland management to reflect a traditional hay cut at one of its service reservoirs near Bath. This will improve the habitat around the reservoir for numerous plant species, which already include pyramidal and bee orchids, and also provide opportunities for other plant, invertebrate and mammal species.



90% of Wessex's landholding within SSSIs is now in favourable or recovering condition and it continues to make progress to meet the national target of 95% by 2010. In the past year, part of its active management for biodiversity, it has:

- continued to work with its agricultural tenants to improve SSSI condition
- controlled invasive species such as Japanese knotweed and Himalayan balsam at a number of sites
- started a programme of heathland management at a reservoir on Exmoor to preserve an important area of humid heath
- worked with its partners to manage other areas of habitat, for example:
  - Butterfly Conservation has been actively managing a chalk grassland site in Dorset to benefit butterfly and plant species. At this site, more than 29 species of butterfly were recorded include Marsh Fritillary and Adonis Blue, UK BAP priority species
  - Dorset Wildlife Trust has been controlling scrub and bracken to maintain an open heathland nature reserve to benefit species such as the sand lizard, a European protected species.

#### *Wild Watch Newsletter*

Wessex Water's new "Wild Watch" biennial newsletter contains important updates on its consistent biodiversity and conservation work.



The environmental teams within Wessex Water undertake a huge variety of work in their area and also manage a wide selection of sites and habitats to conserve and enhance their biodiversity. Besides the partnerships they are involved in, they also invite others in the locale to get involved with conservation work on a voluntary basis.

Visit [www.wessexwater.co.uk/wildwatch/issue1/index.html](http://www.wessexwater.co.uk/wildwatch/issue1/index.html) for more information

#### *Wessex Tree Sparrow Project*

Wessex Water has been part-funding the Royal Society for the Protection of Bird's Wessex Tree Sparrow Project since 2006. The project was initiated by the RSPB following a 97% decrease in the Tree Sparrow population in England between 1967 & 2005, a decline which has been reflected in the population in the Wessex region.

The project set out to identify, consolidate and expand existing tree sparrow populations in the bird's historical range across Wessex, broadly within the chalk river valleys of the Wylde, Wiltshire Avon and Dorset Stour. As well as positively enhancing the prospects for a species seriously threatened within our region, Wessex Water chose to assist the project as the species requires a good quality water environment to provide vital summer food, linking its prospects closely to its work.

In conjunction with its partners, including Natural England, Wiltshire Ornithological Society, National Trust, FWAG, and the local farmers and landowners, the project has been working hard to:

- Locate and monitor tree sparrow populations
- Support populations directly by supplementing existing natural food sources with additional feeding sites & nest boxes
- Work with local communities to encourage them to save their tree sparrow populations
- Provide advice on sustainable habitat requirements to landowners

The project has achieved some notable successes since its start:

- Helping to increase the Wiltshire population to 280 breeding pairs, meeting the county Biodiversity Action Target
- Confirming the first breeding Tree Sparrows in Dorset for 11 years
- Raising the profile of the species to include it as a key theme for Higher Level Stewardship (HLS) applications with specific management prescriptions. This should benefit the species in future years by increasing the amount of suitable habitat available in the target areas
- Been used as an example project – leading to and assisting similar tree sparrow recovery programmes elsewhere in the UK

The project will continue to support the species through 2009 and beyond – thanks to the establishment of the SW Farmland Bird Initiative.

#### Conservation of Historic Assets

Besides biodiversity and nature conservation programmes, the Wessex Water region has strong archaeological interests. Wessex Water works with English Heritage and county archaeology officers to determine risks posed by its maintenance and engineering work. It undertakes inspections of all of its buildings to identify potential problems. This approach led to a full structural survey of two historic disused water towers in Wellington, Somerset which confirmed repair work was needed.



Rockwell Green Towers restoration, Wellington, UK.

A restoration scheme was agreed in 2007 and conservation work began in January 2008. Scaffolding was erected around the concrete tower to enable complete access for repairs, with treatment of cracked concrete and corroded reinforcement, prior to applying waterproof protective coatings to the whole tower. Repair work on the concrete tower took 12 weeks to complete, with subsequent work then undertaken on the adjacent brick tower this year.

This involved de-scaling of loose paint and metal from the steel tank and refurbishment of the brick tower below it, using bricks from a local reclamation supplier to match the existing ones. During the process, Wessex Water liaised with Taunton Deane Borough Council's listed buildings officer to agree the specification of the repair work. Local residents were also consulted to minimise any disruption.

#### Hotel Development & Management



#### Jungle Trekking & Guided Rainforest Tours at our Resorts.

The importance of preserving the natural environment has also been the key to the design of our hotels and resorts, particularly at our Pangkor Laut, Tanjong Jara and Cameron Highlands resorts. Serious efforts have been made to ensure the development of the resorts contribute to conservation efforts and integrates environmental aspects into the design, which includes the types of building materials used, location of the buildings, forest conservation, sustainability and waste disposal.

The rainforest that covers much of Pangkor Laut Resort's island is millions of years old and is faithfully protected. On this island, natural habitats and the environment have been meticulously preserved. The draw card of Pangkor Laut has always been its natural beauty, a fact that has never been lost to our planners.





#### *Biodiverse species found at Pangkor Laut Resort.*

Visitors to the island are encouraged to participate in guided tours to experience this majestic environment first-hand. There are resident ecologists on these 3 resorts, passionately dedicating their time to researching the biodiversity and ecology of the rainforest, wildlife and marine life which thrives on the island, and our Senior Ecologist, Yip, has published a book and several articles on the biodiversity, plant and wildlife found on the island of Pangkor Laut.

Visit [www.pangkorlautresort.com/activities/jungle.htm](http://www.pangkorlautresort.com/activities/jungle.htm) for details of jungle trekking excursions on the island. The walks are free of charge to guests and offer a fascinating insight into the spectacular virgin rainforest that is estimated to be over 2 million years old. Some of the interesting wildlife that can be spotted on the island include crab-eating macaque monkeys, tropical monitor lizards and yellow pied hornbills.

As part of an ongoing commitment to environmental responsibility, YTL has set up an Environment Committee at Pangkor Laut Resort which focuses on sustainability and environmental protection. Here, Green Meetings are held occasionally to discuss current sustainable practices and future improvements going forwards.

YTL is also currently investing in projects to conserve the marine ecosystem resources and coral reefs around Pangkor Laut and its surrounding islands. In February

2008, YTL Corporation invited Reef Check Malaysia to join its conservation partners, RARE Conservation and the Nature Conservancy, on a visit to the resort. The objective of the visit was to assess the prevailing environmental situation, with particular reference to the marine ecosystems around the island.

The report made the following recommendations for actions to improve the current situation:

- Net removal, to eliminate the risk of further damage caused by net movement
- Snorkel guide training, to educate guests and reduce physical damage to corals
- Reef monitoring, to improve management
- Effluent monitoring, to reduce pollution
- Protection (sanctuary), to allow for rehabilitation of reefs over the long term

Following a meeting to review these recommendations, Reef Check Malaysia has successfully carried out an Action Plan for coral reef conservation and rehabilitation at Pangkor Laut, which will be implemented jointly by Reef Check Malaysia, Pangkor Laut Resort and other relevant business units within YTL. The objectives of the action plan were to:

- Remove trash and other debris from the reefs around Pangkor Laut
- Establish an on-going coral reef monitoring programme
- Improve the knowledge of guests, resort staff and local population on the importance of protecting the marine ecosystems around Pangkor Laut through awareness (materials for guests) and education (snorkel guide training)
- Engage local fishermen and other stakeholders to be involved in conservation of coral reefs around Pangkor Laut through establishment of a marine protected area
- Educate students of local fishing communities on the importance of marine conservation

Reef Check Malaysia had two active roles in this project:

- 1) Implement specific activities such as EcoDiver training for resort staff, preparation of materials for guests and snorkel guide training
- 2) Facilitate the implementation of the Action Plan, assisting staff from Pangkor Laut Resort, YTL and possibly other operating units (e.g. Tanjong Jara) with training, advice and assistance

This approach ensured quick results in the short term, whilst also encouraging capacity building among Pangkor Laut Resort staff and more widely within YTL, contributing to long term success and reducing the need for external assistance in future.



Source: YTL Hotels and Resorts.

### Eco-Drive in Pulau Tenggol, Terengganu

In September 2009, IWC Schaffhausen, PADI, Reef Check and YTL Hotel and Resorts' Tanjong Jara Resort jointly announced they would be organising an underwater and beach clean-up in support of marine and environmental conservation from 9 – 11 October 2009. Sharing the same objectives, this clean-up exercise is in support of cultivating and promoting the importance of preserving and protecting the environment and marine life of Pulau Tenggol, one of Asia's best kept dive secrets.

This effort also coincides with IWC's partnership in support of the non-profit Charles Darwin Foundation (CDF) to conserve the threatened species of Galapagos Islands for future generations and to mark the Darwin bicentennial year in 2009. Charles Darwin made his fundamental observations on the origin of species mainly on Galapagos, the unique archipelago in the Pacific Ocean which was never in contact with the mainland at any time in the history of evolution. His work revolutionised the scientific world view and although provocative, it established the basis of modern biology. IWC Schaffhausen will support CDF with a considerable sum of money in its objective of conserving the ecosystem of the archipelago and conducting further scientific research there as the laboratory of evolution must not die.

Here, Tanjong Jara Resort will collaborate with IWC, PADI and Reef Check on this "Eco Drive" to preserve the untouched coral gardens and rare species of marine life at Pulau Tenggol. IWC Schaffhausen together with PADI, Reef Check and Tanjong Jara Resort collectively believe that this worthy endeavour promotes the spirit of love and appreciation of marine paradises, so that mankind is encouraged to protect, nurture and conserve them whilst creating fun and fruitful activities for everyone.

The clean-up will be divided into two categories which include underwater clean-up and beach clean-up. Underwater clean-up will include removing the "crown-of-thorns" starfish from the coral reefs; this is a coral reef predator and is deemed partly responsible for the loss of coral reefs. As already mentioned earlier, YTL has similarly embarked on an earlier reef clean-up with Reef Check Malaysia, as a sustainability exercise for its Pangkor Laut Resort and its surrounding islands.

### Partnerships With Environmental Organisations

- *The Nature Conservancy*



YTL has made a significant donation of USD500,000 to The Nature Conservancy (TNC), a leading conservation organisation working to protect the most ecologically important lands and waters around the world for nature and people. Since its founding in 1951, TNC has accomplished the following:

- Protected more than 117 million acres of land and 5,000 miles of rivers worldwide – operating more than 100 marine conservation projects globally
- Has support of more than 1 million members
- Worked in all 50 US States and more than 30 countries – protecting habitats from grasslands to coral reefs from Australia to Alaska to Zambia
- Addressed threats to conservation involving climate change, fire, fresh water, forests, invasive species, and marine ecosystems

TNC has also set an ambitious goal of ensuring the effective conservation of places that represent at least 10% of every Major Habitat Type on Earth by 2015.

YTL Corp's Managing Director, Tan Sri Dato' (Dr) Francis Yeoh, is a long-time member and Trustee of this organisation, joining the likes of Henry M. Paulson, Jr. (current US Treasury Secretary and former Chairman of TNC) and Mark Tercek (the current Chairman of the Board at the Nature Conservancy and Managing Director at Goldman Sachs, USA, and Head of Goldman Sachs' Centre

for Environmental Markets, as well as the firm's Environmental Strategy Group) to support work on forest protection and on coral reef conservation in South East Asia, primarily Indonesia.

TNC used these funds to combat illegal logging in Indonesia, in partnership with the government and industry, and local communities. This resulted in development of new tools for verification of legal and illegal timber based on bar coding of logs, and tracking them from the forest through the production and export processes. This pioneering effort, which had previously never been tried anywhere else, became a success and is now being adopted by companies across Indonesia. A series of major new projects are unfolding, using international foreign assistance and private funds to help the Indonesian government to roll the system out nationally. Cooperation from Malaysia's government was paramount in this effort to help stem the flow of illegal logs moving from Indonesia to Sarawak and Sabah.

YTL's contribution is now being used to help establish a *Tropical Forest Center* to be developed in Borneo consisting of a small group of TNC staff expert in forestry, forest ecology, training and communications.

The USD500,000 donation enables continuity of this work and identifies important forest habitats throughout the island of Borneo, including the four Indonesian provinces and Malaysian Sabah and Sarawak.

Map of Indo-Malaya region to be developed.



**Allocation of Funding**

	Project Activity	Request (US\$)
1.	<b>Establish and manage a Tropical Forest Center for Indo-Malaya</b>	
	Assessment of important forest habitat (HCVF) island-wide throughout Borneo	150,000
	Conduct training programs that strengthen partners, provide support to ongoing projects, and create a supportive and enabling environment for on-site conservation in Indonesia and at sites throughout Indo-Malaya	150,000
	Support for policy initiatives increasing acceptance of Sustainable Forest Management in various countries throughout the Indo-Malaya region	100,000
	Support for TNC site based initiatives in Borneo and Sulawesi	100,000
	<b>Total</b>	<b>\$500,000</b>

Source: The Nature Conservancy.

TNC's work on coral reef conservation is also continuing to grow from strength to strength. The Coral Triangle Center (CTC, [www.coraltrianglecenter.org](http://www.coraltrianglecenter.org)) for marine conservation has been established in Bali and is now the hub for expansion of TNC's tried and tested tools to many sites around the region, combining improved enforcement methods to combat illegal and destructive fishing, with support to communities to find alternative sources of income, and use more sustainable fishing techniques. The Coral Triangle harbors the most diverse reefs on Earth and has been identified by major international biodiversity conservation organisations (TNC, WWF, WRI and CI) as a global priority conservation area. The World Resources Institute estimated that 88% of these reefs are under threat from human activities, with over-fishing and destructive fishing being the most pervasive threats. TNC's goal is therefore to establish and strengthen resilient networks of Marine Protected Areas (MPA) within priority ecoregions of the Coral Triangle area in Southeast Asia.

In 2008, the Global Environment Facility (GEF) and the United States Agency for International Development (USAID) committed over USD400 million to the Coral Triangle Initiative (CTI). In late April, the GEF Council approved a CTI programme beginning with a five-year support package for the "Coral Triangle 6" (CT6)

countries: Malaysia, Indonesia, Timor-Leste, Papua New Guinea, Philippines and the Solomon Islands. The funding will be organised around the CTI Plan of Action currently developed by the CT6 which includes five major goals: marine protected areas, seascapes, ecosystem-based fisheries management, threatened species, and climate adaptation. TNC will be working closely with the countries and other partners to develop more specific activities and investments over the next 12 – 18 month design phase, with the Asian Development Bank (ADB) serving as the Implementing Agency for the programme.

More information on TNC can be obtained from their website: [www.nature.org](http://www.nature.org).

#### YTL's Commitment to WWF-Malaysia and Rare Conservation



Ruth Yeoh, Director of Investments at YTL Corp, with fellow Rare trustees and staff at Rare Conservation's field trip to Belize, Central America, from 31 January – 4 February 2008.



Ruth Yeoh, Director of Investments at YTL Corp accepting a handcrafted Mexican 'manatee puppet' as a welcome gift to the Rare Board from Wendy Paulson, Chairperson of Rare Conservation USA, in Belize, 2008.

In October 2007, YTL donated a total sum of USD200,000 (USD100,000 each) to fund conservation efforts and sustainability projects at both WWF-Malaysia and Rare Conservation.

**WWF-Malaysia** is a national conservation trust that currently runs more than 75 projects covering a diverse range of environmental protection and nature conservation work in Malaysia. Since 1972, WWF-Malaysia has worked on important conservation projects, from saving endangered species such as tigers and turtles, to protecting highland forests, rivers and seas. WWF-Malaysia is able to leverage upon conservation expertise worldwide as part of WWF, the global conservation organisation. It is anticipated that YTL's contribution will be used to develop a *Human-Wildlife Conflict Mitigation Model* in the Jeli District of Kelantan. This is one of the poorest districts in Peninsular Malaysia and yet it has one of the highest incidences of human-wildlife conflict.

**Rare Conservation**, a US-based conservation organisation, works globally to equip people in the world's most threatened natural areas with the tools and motivation they need to care for their natural resources. Because *Rare* offers a suite of replicable tools and a training program in three languages (including Bahasa Indonesia/Malay), its partnership is often sought by large international conservation groups and coalitions that need a strong outreach component to their broader strategy. Recognised by *Fast Company* magazine as one of the "Top 25 Social Capitalists" for 2005, 2006 and 2007, Rare's signature "Pride" program and conservation toolkit is being used by everyone from *The Nature Conservancy*, *World Wildlife Fund*, and *Wildlife Conservation Society* to the *United Nations Environment Programme*, *Earthwatch*, and more than one hundred local NGOs around the world. YTL's contribution to Rare will be used to establish a cadre of effective local conservation leaders in Malaysia using social marketing tools and Rare Pride to (1) measurably enhance local support for conservation; (2) achieve measurable threat reduction for at least three major threats to biodiversity in Malaysia, i.e. mangrove and coastal habitat degradation, destructive near shore fishing, and forest clearing by local communities; (3) and in the longer term, shift broad perceptions of and enhance support for conservation in Malaysia using broader mass media approaches (radio, local TV and other channels) integrated across the proposed partnerships and campaigns.

In January 2008, Ruth Yeoh, Director of Investments at YTL Corp, was elected to become the youngest board member of Rare Conservation and now serves in the Governance Committee of this US-based environmental organisation. She is instrumental in orchestrating Rare's partnerships with practitioners in South-East Asia and has successfully engaged WWF-Malaysia and Reef Check Malaysia, both local environmental organisations in Malaysia, to partner with Rare for their *Rare Pride* Campaigns. Ruth also travels on trustee duty for field visits to remote regions and communities actively to participate in conservation programmes around the globe.

Visit [www.wwf.org.my](http://www.wwf.org.my) and [www.rareconservation.org](http://www.rareconservation.org) for more information on these organisations.

### Support for Local Environmental Organisations



The first YTL *Climate Change Fundraising Gala*, held in conjunction with our second *Climate Change Week* in 2008, raised more than RM700,000 in support of three Malaysian conservation groups to help them protect our precious environment. Proceeds raised went to three non-profit groups, namely:

- Reef Check Malaysia, a non-profit group who conserves and protects priceless local coral reefs;
- *Malaysian Nature Society (MNS)*, who have been conserving important habitats, raising public awareness and advocating environmental policy for almost 70 years;
- *TrEES (Treat Every Environment Special)*, who promote sustainable lifestyles at the local community level through programmes like community recycling centres.

#### Reef Check Malaysia

YTL is a proud supporter of Reef Check Malaysia in line with "International Year of the Reef 2008", believing in the fact that a third of the world's coral reefs may face extinction should nothing be done to protect them. We support Reef Check Malaysia and its broad spectrum of activities in marine and coral reef conservation. Founded in 1996, Reef Check is the world's largest international coral reef monitoring organisation. It is a non-profit organisation that recruits volunteer marine scientists and divers to survey the reef and collect data to help assess reef health. Once the condition of the reef is determined, they find ways to manage the reef and encourage its long term health. Reef Check is now active in over 82 countries and territories throughout the world.

Its mission is to:

- Educate the public and government about the value of the coral reef and the crisis they face
- Create a global network of volunteer teams, trained and led by scientists, that regularly monitor and report on reef health using a streamlined method
- Facilitate collaborative use of reef health information by community groups, governments, universities and businesses to design and implement ecologically sound and economically sustainable solutions
- Stimulate local action to protect remaining pristine reefs and rehabilitate damaged reefs worldwide

Malaysia is part of the "Coral Triangle", an area recognised by scientists as having the richest marine biodiversity in the world. There are some 3,600 kilometres of reef around the country, including fringing reef and offshore islands, and over 350 species of hard coral have been identified in Malaysian waters, making the case to protect them even more valid.

In 2009, Ruth Yeoh, Director of Investments at YTL Corp, was elected to become the youngest board member of Reef Check Malaysia and now serves in the Committee of this environmental organisation, dedicated to protecting reefs and coral life in Malaysia and the Southeast Asian region.

Visit [www.reefcheck.org.my](http://www.reefcheck.org.my) for more information on Reef Check Malaysia.

#### Malaysian Nature Society

The Malaysian Nature Society (MNS) has been contributing towards the protection of Malaysia's natural heritage since 1940. Being a membership-based organisation, they have been the reason behind the protection of many key habitats as well as national and state parks in Malaysia, which YTL is passionate in protecting.

MNS works very closely with federal and local governments, grassroots communities, private organisations as well as members of the media. Over the years, MNS, through its members, partners and supporters, has played an integral role in the conservation of Malaysia's natural heritage. Being the largest membership-based environmental organisation in the country and with a string of successes in conservation, it has now clearly become a strong voice for conservation in Malaysia; presenting its stand in promoting and ensuring responsible environmental stewardship in the country.

MNS adopts a 4-prong approach towards habitat conservation:

1. Its Conservation unit works towards conserving important habitats through policy and advocacy, research and data collection in consultation with the federal and state governments. Its conservation campaigns over the years have always included engaging local communities.
2. The Environmental Education unit of MNS works towards raising public awareness, with an emphasis amongst school children through project involvement and hands-on experience. They have established School Nature Clubs in collaboration with the Ministry of Education, throughout the country, where children learn about the importance of the environment and nature conservation.
3. MNS' Publications include primarily a popular quarterly periodical, the Malaysian Naturalist (MN), and a scientific periodical, Malayan Nature Journal (MNJ). These MN publications are aimed at relaying key conservation messages to the public; educating and increasing awareness on the environment, whilst the MNJ publications are targeted towards the scientific community.
4. The Parks unit of MNS looks into establishing and managing Nature Parks; primarily aimed at creating and raising public appreciation on nature and our environment. Parks bring nature closer to the public, creating an opportunity for better understanding of our natural surroundings.

In this new millennium MNS' work has become very vital for the continued conservation of our natural habitats. Visit [www.mns.org.my](http://www.mns.org.my) for more information on MNS.

### *Treat Every Environment Special*

Treat Every Environment Special (TrEES) environmental programmes seek to reconnect the public back to nature; to demonstrate the impact their activities have on the country's biodiversity and the role they play in its conservation. They have also helped YTL successfully implement a recycling programme at their Headquarters in Kuala Lumpur.

TrEES works in partnership with diverse community groups including the government, local communities, NGOs, CBOs and the private sector towards the sustainable development and management of local environmental and biodiversity resources in Malaysia. Their projects range from grassroots and action oriented projects to policy advocacy projects.

Their current projects include:

- The Establishment of a Selangor State Park
- TrEES School Biodiversity Programme
- TrEES' Community Recycling & Waste Management Programme
- TrEES' Biodiversity Centres
- Environmental Awareness Programmes

With the funds raised from YTL's Climate Change Gala, TrEES are implementing community waste management programmes based on the 4Rs (Rethink, Reduce, Re-use and Recycle), targeting the Malaysian public through community recycling centres and schools in the Klang Valley, as the Klang Valley is the most densely populated area in Malaysia and generates the most rubbish.

Activities planned include:

- Identification of suitable sites for expansion of the number of recycling centres
- Setting up infrastructure for new recycling centres
- Training and motivation for centres and schools
- Increasing the amount of recyclables collected and the number of people recycling
- Logistics and collection management
- Education and public outreach programmes on reducing rubbish and promoting recycling

Visit [www.trees.org.my](http://www.trees.org.my) for more information on their recycling programmes.

### CLIMATE CHANGE

YTL, an advocate of environmental protection and promoting energy efficiency, have been consistently 'Seeking Zero' carbon emissions by working with partners who use clean technology, educating employees, supporting R&D for clean technology, investing in more efficient processes and systems while educating the public through initiatives like *Climate Change Week* and the *YTL Bird Island Green Homes Competition*.

We recognise the impact of global warming and climate change on our community, not just locally, but globally. We regard climate change as a clear risk and have taken measures to reduce Green House Gas (GHG) and noxious emissions in all our activities, from our utilities and cement manufacturing plants to property and hotel operations.

Furthermore, we understand that a company that adopts strategies to manage risks and opportunities associated with climate change in the face of uncertain regulations stands to realise significant gains. These gains come from a variety of factors including regulatory compliance, risk mitigation, cost reduction, development of a competitive advantage, and the creation of new products and markets. The three governance practices the YTL Group has adopted, and as outlined by Ceres<sup>1</sup>, include:

<sup>1</sup>Ceres (pronounced "series") is a national network of investors, environmental organisations and other public interest groups working with companies and investors to address sustainability challenges such as global climate change. More information [www.ceres.org](http://www.ceres.org)

- Boards of directors and senior executives working together to address climate change and other sustainability issues
- CEOs embracing climate change as a near-time priority
- Management teams pursuing practical solutions to climate change

Our Managing Director, Tan Sri Dato' (Dr) Francis Yeoh Sock Ping attended the 2006 Clinton Global Initiative (CGI) in New York, an annual meeting where top leaders meet to focus on issues such as Energy and Climate Change. He was further invited by CNBC to discuss the effects, solutions and business of climate change, alongside a top panel of experts on their "Global Players" special, a follow up programme of the CGI. The panel included top academics and business personalities such as Jeffrey D. Sachs (Dean of the Earth Institute, Columbia University), Jim Hansen (Head of the Goddard Institute), Jeremy Leggett (CEO Solarcentury) and Fred Smith (President of the Competitive Enterprise Institute). Tan Sri Francis was the only Asian businessman chosen to represent Asian perspectives on climate change.

The YTL Group is thus actively searching for innovative ways to encourage energy saving and to minimise the risk and glaringly visible effects of climate change. We therefore anticipate our future projects to integrate technology, policy and positive action to steer our company towards being not only clean and green, but also secure, in trust for future generations.

## YTL presents Climate Change Week, 24 April – 31 May 2009



Ruth Yeoh (YTL) and Basil Chua (National Geographic Channel) at the launch of Climate Change Week 2009.

Climate Change Week is YTL's flagship educational campaign and long term outreach programme designed to educate Malaysians about the critical nature of global warming and the importance of environmental protection.

This year, *Climate Change Week* – back for its third consecutive year – brought Malaysians all over the country the exclusive Malaysian premiere of the acclaimed documentary, *Strange Days on Planet Earth: Oceans*. Hosted by award-winning actor, director and environmental activist Edward Norton, *Dangerous Catch* and *Dirty Secrets*, the two latest episodes of *Strange Days on Planet Earth* offered a startling look into the health of the earth's water system and the shocking truths which impact every single living being on earth.

From 24 May onwards, Malaysians in both urban or rural areas were invited to tune in to watch this very special environmental series on their TV screens. Kicking off with the premiere of the exclusive eco documentary, "*Strange Days on Planet Earth: Oceans*", The premiere saw 300 guests of YTL Corp at the special screening of the documentary. This year *Climate Change Week* will be presenting a televised premiere screening to support its goal of reaching out to more Malaysians than ever before on the importance of Climate Change.

This screening also marks YTL's first partnership with the National Geographic Channel. The two organisations hold similar values in their beliefs and commitment to curb climate change. National Geographic Channel, which is well known for its programming resources and factual accuracy, has been a long-term champion for the environment providing insights on natural conservation, world exploration and education for global viewers. Its partnership with YTL Corp is part of an on-going effort in raising awareness on the need to preserve the planet.

Previous Climate Change Week activities in 2007 and 2008 included:

- **Two global book launches of environment and climate change-related books**
- **Free week-long public screenings of award-winning eco-documentaries**
- **Business Conferences** – usually one-day climate change business strategy conferences on climate change solutions
- **Climate Change Week Youth Workshop** – a free, interactive full-day workshop targeted at secondary schools in the Klang Valley, held at The KLPac
- **Climate Change Gala** – a Gala Dinner with a mission to help raise funds for three Malaysian conservation groups

For more information and details on our **Climate Change Week** programmes, we invite you to visit [www.ytlcommunity.com/climatechange](http://www.ytlcommunity.com/climatechange). Come and join us in our educational campaign, and sign up to receive news and updates on **Climate Change Week**.

#### YTL participates in Earth Hour 2009



(L-R) Jes Ebrahim, Fahmi Fadzil, Ruth Yeoh and Devan Subramaniam at the Press Conference for YTL's announcement of its participation in Earth Hour 2009.

YTL Corporation actively supported Malaysia's first "Earth Hour" in 2009, committing more than 20 of its iconic properties from Bintang Walk's Starhill Gallery, The Ritz-Carlton and JW Marriott to the award-winning Pangkor Laut Resort and KL's only residence with a private gated park, The Maple at Sentul West, in the one-hour lights off event that is aimed to send a powerful message of hope and action against global warming on 28 March 2009. The move was in line with YTL's long-time commitment to environmental protection, which over the last decade has seen the Group make sustainable development and energy efficiency a core part of its business strategy particularly in its construction, utilities, property and infrastructure businesses.

YTL's Earth Hour celebrations on 28 March 2009 featured a line-up of energy-saving activities that people could learn to adopt in their daily lives, creating a more sustainable society in the long run. Shoppers and diners at Starhill Gallery were entertained by acoustic performances by Sean Ghazi, Deanna Yusoff and young environmental activist and performer Jes Ebrahim while Five Arts Centre staged a shadow stage play, all held at Shook! Feast Village from 8.30 pm to 9.30 pm. During this hour, YTL's hotels and restaurants also served special Earth Hour menus by candlelight and 'Dining under the Stars', a romantic dinner experience held by the hotels' poolside for guests engaged them in a spot of stargazing, whilst being serenaded by a team of talented musicians.

Besides Malaysia, YTL's Wisma Atria property Singapore also participated in Earth Hour. The popular Orchard Road mall with the collective support of its retailers will switch off its exterior lights, keep interior lights at a minimum and organise various activities that include a DJ booth, late night shopping and even a chance to view the stars up close using telescopes strategically placed outside the mall.

#### YTL Establishments which supported Earth Hour 2009:

- Starhill Gallery
- JW Marriott KL
- The Ritz-Carlton KL
- The Residences at The Ritz-Carlton KL
- Lot 10 Shopping Centre
- YTL Corporation Headquarters
- One Oriental Place
- Sentul Park
- Sentul Park Koi Centre
- Vistana Kuala Lumpur
- Vistana Penang
- Vistana Kuantan
- Pangkor Laut Resort
- Tanjong Jara Resort
- Cameron Highlands Resort



- The Majestic Malacca
- The KL Performing Arts Centre
- Lake Edge – Puchong
- Pantai Hillpark
- The Maple at Sentul West
- The Tamarind at Sentul East
- The Saffron at Sentul East
- Spa Village Kuala Lumpur
- Wisma Atria Singapore
- PowerSeraya Singapore

For more information, please visit YTL Community's Earth Hour microwebsite at [www.ytlcommunity.com/earthhour](http://www.ytlcommunity.com/earthhour).

### Starhill Global REIT wins WWF Earth Hour Best Engagement Activities Award



Starhill Global REIT won the World Wide Fund for Nature (WWF) Earth Hour Corporate Participation Award for "Best Engagement Activities", for its innovative initiatives to engage business partners and shoppers at Wisma Atria, a leading mall along Singapore's premier shopping street Orchard Road. WWF also gave out two other main awards for "The Greatest Impact" and "Beyond 60-minutes Initiatives" at an informal appreciation get-together of like-minded corporate champions. The judging panel, comprising representatives from Weber Shandwick, Microsoft, Leo Burnett, Starcom and Rachen Faulkner, reviewed some 60 submissions from participating corporates.

According to Ms Carine Seror, WWF Singapore's director for corporate responsibility, 40% of Singapore's population, or more than 1.6 million people, switched off their lights during Earth Hour, between 8.30 pm to 9.30 pm on 28 March 2009. For its part, Wisma Atria did more than switch off its façade lights that Saturday. To engage shoppers, the mall had a slew of activities for the Late-Night Saturday Shopping crowd. This included romantic candle-light dining at various F&B outlets, outdoor acoustic music performances, star-gazing opportunities

at the open-air rooftop, a "bring-your-own shopping bag" initiative and physical and online pledge books.

The response was encouraging. About 50,000 people visited Wisma Atria that day, more than 500 people attended the star-gazing session helmed by the Astrological Society of Singapore and close to 1,700 pledged to do their part for Earth Hour.

In accepting the award, Mr Kevin Chee, Senior Vice President (Asset Management) for Starhill Global REIT said, "We would like to thank both our office and retail partners for giving us their strong support, without which our Earth Hour initiatives would not have succeeded. Our special thanks to our executive chairman Tan Sri Francis Yeoh and our sponsor YTL Corporation, for inspiring us with their championship of pro-environment measures and spurring us to do more for Earth Hour. Wisma Atria was one of 24 properties within the YTL stable which participated in Earth Hour 2009."

For more information, please visit YTL Community's Earth Hour microwebsite at [www.ytlcommunity.com/earthhour](http://www.ytlcommunity.com/earthhour).

### Carbon Credit Consultancy Services



From left: YTL Corp director of investments Ruth Yeoh, Tan Sri (Dr.) Francis Yeoh and Soeren Varming at the launch of YTL-SV Carbon.

In May 2008, YTL Corporation announced their acquisition of Malaysian-based Clean Development Mechanism (CDM) developer, SV Carbon, now known as YTL-SV Carbon Sdn Bhd. The launch of YTL-SV Carbon took place during YTL's *Climate Change Week 2008*. Managing Director of YTL Corp, Tan Sri (Dr.) Francis Yeoh, announced the acquisition of YTL-SV Carbon during the business conference themed "Energy Security and Climate Change in the 21st Century" where many leaders and entrepreneurs gathered to explore the critical role of technology in tackling climate change challenges.

With 15 years of experience in energy and CDM, YTL-SV Carbon is currently the largest CDM consultancy in Malaysia, and is No. 3 in the ASEAN region with projects in Indonesia, Thailand and China. Following a strong commitment to nurturing clean technologies globally, YTL's latest venture will see YTL-SV Carbon provide end-to-end solutions for projects under CDM, handling all aspects of the process including identification of the potential projects, development of documentation, and approvals and sale of carbon credits regionally and globally. Examples of projects include biomass, biogas, other clean energy from agricultural waste and municipal solid waste, cement & industrial waste. It also works with plantation companies to develop clean energy from waste biomass and effluent plants.

As a background, the Clean Development Mechanism (CDM) allows companies to turn environmental improvement into a cash flow. The CDM does this by defining a new commodity, Certified Emission Reductions or CERs. The CERs are generated by an approval process involving both the host country Government and the United Nations. CERs can be sold as other commodities either on forward contracts or spot. By May 2008, more than 1,000 projects have been approved internationally as CDM projects.

Buyers of CERs are Governments and private sector in industrialised countries. In 2007, more than USD13 billion worth of CERs were traded internationally and we foresee this is the right time for companies in ASEAN countries to embark on CDM projects. Recent studies have shown that the carbon trading business in Malaysia is expected to be worth RM3.2 billion and RM6.4 billion in the next 5 years, driven by companies' increased participation in environmentally sustainable projects. The Malaysia Energy Centre estimates that the country has up to RM100 million tones of carbon credit potential for the 2006 to 2012 period and it could benefit from carbon trading, which is now worth USD60 billion globally but could grow to USD1 trillion in a decade. Currently, the Government is also giving companies involved in CER, and renewable and environment-friendly energies a tax exemption for 10 years, investment tax allowances and import duty and sales tax exemptions on equipment.

YTL-SV Carbon therefore offers tailor-made solutions for companies wishing to embark on carbon emissions reduction projects, starting with the screening of project potentials to the signing of the sales contract for the carbon credits. It works on a "No Cure, No Pay" basis, which means it takes the main risks involved in CDM project development. The further the project is developed in the CDM approval process, the higher a price the CERs can achieve. YTL-SV Carbon will work with its clients to maximise the value of their projects throughout the entire process.

Visit [www.ytl-svcarbon.com](http://www.ytl-svcarbon.com) for more information on the specialist services we provide.

## Power Generation & Transmission

### *Paka and Pasir Gudang Power Stations (Malaysia)*

YTL Power is in the process of obtaining ISO 14001 *Environmental Management Systems* ("EMS") certification for its power stations in Paka and Pasir Gudang in Malaysia and mechanisms are also being implemented for the management of power plant gaseous emissions, waste effluent, discharge cooling water and industrial scheduled waste.

Natural gas is the only fuel used in the YTL combined-cycle power plants. This is the most environmentally-friendly fuel compared to other fossil fuels. The emissions of greenhouse gases are minimum and much lower than local and international standards.

Recent modifications made to two of the Paka Power Station's gas turbines (Paka GT11 and GT12) have reduced the amount of nitric oxide and nitrogen dioxide (the combination of which is commonly referred to as NOx) in the gas turbines' exhaust gases by around 50%. The same modifications are also planned for the stations' other gas turbines. Efforts have also been made to reduce the water consumption of the power stations by stopping blowdown on the heat-recovery boilers and reducing and eliminating, where possible, leaking valves on water-stream systems.

In addition, all four Paka gas turbines have undergone the removal of the secondary Air Flap, with Pasir Gudang gas turbines due in July 2009 and 2010 respectively, and thereby reducing further NOx emissions.

### *YTL PT Jawa Power Station (Indonesia)*

The Jawa Power station, which is operated by Jawa Timur, a wholly-owned subsidiary of YTL Power, continues to seek ways to reduce its carbon footprint. Jawa Power's Piton II station has been awarded the 'Green Rating' under Indonesia's Environmental Rating Programme since 2004 and continues to maintain it. This award is given for companies that have demonstrated very good performances in environmental protection, environmental management system, and community development. This is in line with its Environmental Policy Statement "to develop and maintain a high standard of environmental care, to prevent pollution and to improve continually its environmental performance."

The station has a daily fuel consumption of approximately 12,000 tonnes of coal, which in turn generates about 400 tonnes of ash per day. The bulk of this is “fly ash” – smaller, lighter particles of ash that are separated from boiler exhaust gases in the electrostatic precipitators. With the consistency of very fine powder, fly ash has the potential to pollute the air and groundwater as it contains traces of salts and metals, and the conventional method used to dispose of fly ash is to convert it into slurry and pump it into specially-built ash lagoons.

In 2002, however, Jawa Power embarked on efforts to find a safer and more environmentally-friendly use for the station’s fly ash, and in 2003, the company began sending its fly ash to a nearby cement processing plant for testing. Fly ash reduces the cost of manufacturing concrete as it is only mixed with the cement in the final stages of production, making it an inexpensive replacement for cement used in concrete. In addition, fly ash actually improves the strength of the final product. After successful trials, the cement plant invested in additional facilities to enable it to use Jawa Power’s fly ash, resulting in the utilisation rate of Jawa increasing from only 26% in 2003 to 78% in 2006.

**Monitoring Atmospheric Emissions**

In line with corporate aims to cut carbon emissions, YTL Power’s PT Jawa Timur plant consistently puts efforts into maintaining high figures of Generation Efficiency which will result in less carbon emissions per MWh electricity generated, as these charts illustrate.

The chart (above) shows that efficiency figures are improving even though the power station is aging. This was achieved by implementing sound operation and maintenance practices, periodic performance tests, regular efficiency monitoring, maintaining availability figures, minimising start up times, and implementing Work Improvement Teams (WIT) to explore room for efficiency improvements and auxiliary power reductions. New efforts have recently been pursued as part of auxiliary power reductions in the power station. The programme plans to optimise the number of Absorber Pumps in operation in the FGD system which will benefit the overall environmental protection scheme in the plant. This programme has saved approximately 1,000 MWh per month of auxiliary power consumption.

Atmospheric discharges from PT Jawa Power’s plant are from two chimneys, 220 metres in height. The major emissions are Carbon dioxide (CO<sub>2</sub>), Sulfur dioxide (SO<sub>2</sub>), Nitrogen oxide (NO<sub>x</sub>), and particulates.

In line with its aim to cut carbon emissions, PT YTL Jawa Timur has put strong efforts to maintain the high figures of Plant Efficiency which will result in less carbon emission per MWh electricity generated. The improvement of efficiency figures is directly reflected in CO<sub>2</sub> emissions per MWh of electricity generated, as shown in the chart:

The high efficiency figures are maintained by implementing good operation and maintenance practices, periodic performance tests, efficiency monitoring and through work improvement teams to explore any initiative for efficiency improvement. All emission parameters are well managed, and well below the stipulated government regulation limits for emissions.

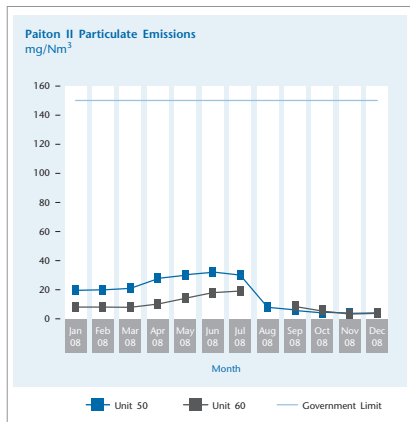
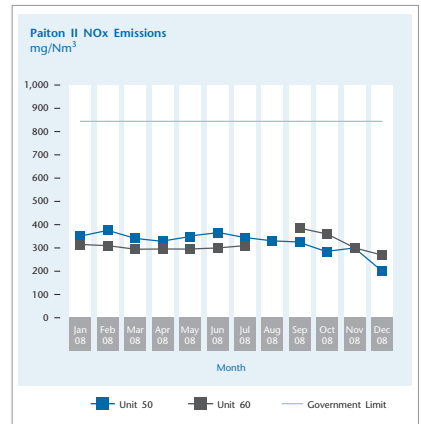
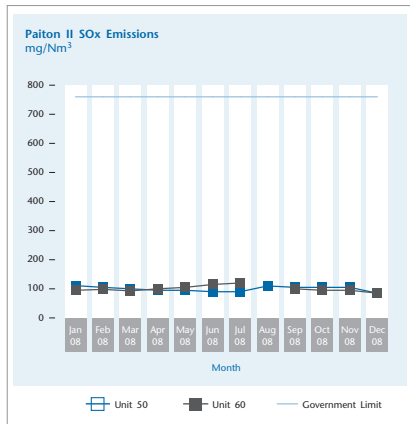
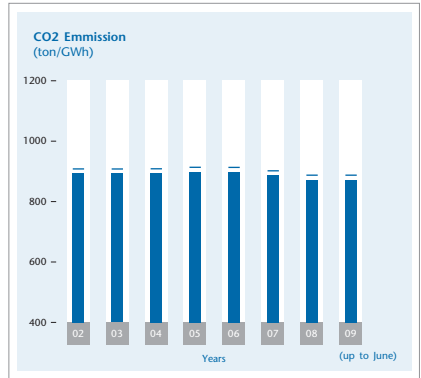
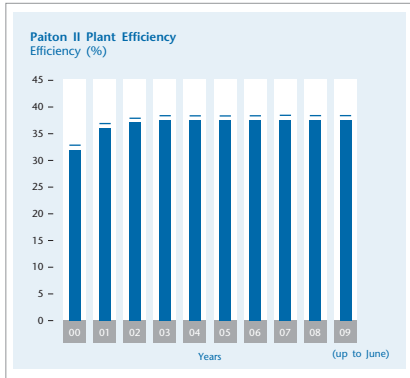
**PowerSeraya (Singapore)**

Some of PowerSeraya’s environmental activities include the following:

- Its Water Desalination Plant being named ‘Desalination Plant of the Year’ at the Global Water Awards 2008
- The World’s 1st SWRO using a 16-inch membrane
- Its declining carbon dioxide (CO<sub>2</sub>) and Sulphur Dioxide (SO<sub>2</sub>) emissions over the past decade linking to plant efficiency and FGD efficiency (ongoing)
- Office Resource Consumption
- Raising Environmental Awareness to the Community through a “1 Degree UP” Challenge
- International Coastal Cleanups
- “Care for the Environment’ Event
- Public Conference on Climate Change, CGS 2009
- The Semakau Run
- Product Responsibility – educating SE customers how best to utilise the energy that they sell to them

**Tapping into Renewable Resources with PowerSeraya’s Desalination Plant**

PowerSeraya’s desalination plant earned the Distinction award for ‘Desalination Plant of the Year’ at the Global Water Awards 2008. Widely recognised as the top accolade for the greatest technology achievement in the international water industry, the award is testament to PowerSeraya’s commitment of staying at the forefront of innovation to meet industry needs.



The desalination plant, which has a capacity of producing 10,000 m<sup>3</sup>/day, is also the world's first to use the 16-inch large diameter membrane SWRO (Sea-Water Reverse Osmosis) technology when it was officially launched in early 2008. It not only increases the company's self-sufficiency in water but also contributes towards the Singapore Green Plan 2012 by reducing the demands on Singapore's scarce water resources. In 2008, about 90% of plant's water needs could be met by the desalination plant. The desalination plant also complements other water conservation efforts of the company such as chemical and wastewater recycling. For instance, contaminated condensate from its power turbines is treated and reused in boilers, thereby conserving water and reducing costs.

### Engaging Stakeholders with the '1 Degree Up Challenge'

On World Environment Day (5 June 2008), a joint initiative called '1 Degree Up Challenge' was launched by PowerSeraya and Mapletree (landlord of HarbourFront Towers where PowerSeraya's corporate headquarters is located). This event saw all companies at HarbourFront raising their office temperatures by 1°C on that day with the aim of spreading the message of energy conservation and lowering CO<sub>2</sub> emissions. Preparations involved the sending of letters to all companies in the office towers rallying them to participate in this meaningful initiative. A month-long poster campaign to raise the awareness of this initiative was also done in partnership with the National Environment Agency and Mapletree. This initiative received an overwhelming participation rate of 100% with an outreach of about 40 companies covering an estimated 3,500 office workers.

### Water & Sewerage Services

Climate change is the biggest long-term issue for water utilities and is covered by **Wessex Water's Sustainability Vision** as follows:

**Outcomes (what a sustainable Wessex Water would mean)**

- Aiming for the company's combined activities to be carbon neutral, and using energy as efficiently as possible
- Being in a position to adapt to weather events caused by climate change, without harming levels of service and standards

### *Mechanisms (action for moving towards sustainability)*

- An active programme to ensure that energy is used efficiently to minimise consumption
- Steadily increasing the proportion taken from renewable sources
- Reducing greenhouse gas emissions equivalent to a 60% cut between 1997 & 2050

Two broad issues that are considered are:

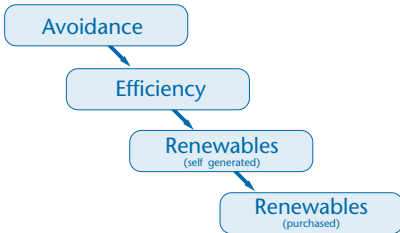
- **Adapting to climate change** – more turbulent weather patterns will make it harder to achieve the customer and environmental standards expected of water companies
- **Reducing emissions** – water companies' heavy energy use and sizeable process emissions make the aim of carbon neutrality extremely challenging

Wessex Water's Sustainability activities given in greater depth in its Striking the Balance 2008 report which sets out its objectives and plans to become carbon neutral by 2020.

### Carbon Management

Climate change awareness and carbon management have been at the forefront of Wessex Water's developments and its central aspiration towards becoming a genuinely sustainable water company, tracking its progress against the government's reduction path for greenhouse gas emissions. Its environmental impacts – for example, quantities of water taken from the environment, effluent released into rivers, re-use of sludge and greenhouse gas emissions (mainly carbon dioxide and methane) - are closely monitored through environmental regulation. It is important to note that tighter environmental regulation has consequently benefited the water industry more. Wessex's carbon dioxide emissions are now lower than in 1990 because of technological advancements enabling the carbon content of an average kWh of electricity from the national grid to be lower.

Its carbon management plan involves the first three stages of the carbon hierarchy – avoidance, efficiency, renewable energy.



Source: Wessex Water, *Striking the Balance* report.

As well as specific carbon cutting initiatives, it is implementing a number of management measures to ensure that carbon management is built into decision making and operational activity.

To address these challenges we need to take action on many fronts simultaneously. Over the last year, Wessex Water has:

- redoubled its efforts on energy efficiency, carrying out upgrades to its site control systems. This is enabling Wessex Water to access further energy savings on sites by improving operational practices
- been paying particular attention to sewage treatment works with the highest power use where the focus has been on more innovative approaches, such as aeration and ammonia control. This work has subsequently delivered 2GWh of energy savings, with further savings planned over the next few years
- invested in generating more of our power from sludge digestion. The company started to produce electricity in the 1960s from the biogas produced by sludge digesters, and its recent improvements in advanced digestion at its Bristol sewage treatment works mean that it now produces more power than ever before from this source
- it plans to replicate this at a number of other sites between 2010 and 2015 and is actively looking at the potential to digest food waste for power production via a new business, GENeco
- controlled leakage, encouraging customers to use water wisely and working with farmers to reduce contamination of groundwater by fertiliser and pesticides; between them these are helping the company manage the carbon footprint of water supply
- Looked at the potential to use wind power to generate renewable energy and this year obtained planning permission for four turbines. It is also

investigating the amount of carbon that is transferred to soil when sludge is reused on farmland.

Much more needs to be done, but Wessex Water remains committed to the task and subsequently won a **SouthWest C+ Carbon Positive Footprint Award in 2008** for its work in this area.

*Investment towards sustainability*

The Table outlines the investment towards sustainability that Wessex Water made in 2008-2009. This includes expenditure on customers and communities, the environment, employees and infrastructure. A distinction is made between:

- mandatory investment – expenditure governed primarily by legislation or regulation
- discretionary investment – additional expenditure that the company chooses to make

The benefits can be primarily for third parties, the company itself, or evenly split between both.

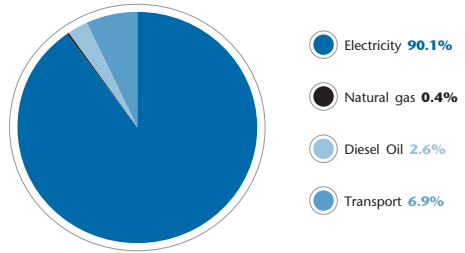
Investment towards sustainability – unaudited 2008-2009	
CUSTOMERS AND COMMUNITY	Amount £'000s
Mandatory expenditure	50,082
Example – water supply quality enhancement work such as mains relining	
Discretionary expenditure (a)	–
Discretionary expenditure (b)	541
Example – replacement of customers’ supply pipes; education service	
Discretionary expenditure (c)	163
Example – charitable donations to community projects	
<b>ENVIRONMENT</b>	
Mandatory expenditure	48,700
Example – capital investment to meet the Bathing Water Directive	
Discretionary expenditure (a)	–
Discretionary expenditure (b)	1,051
Example – trials on options for more sustainable water resources	
Discretionary expenditure (c)	78
Example – conservation grants to wildlife trusts	
<b>EMPLOYEES</b>	
Mandatory expenditure	63,440
Example – basic pay and conditions including pension	
Discretionary expenditure (a)	4,461
Example – enhanced overtime payments	
Discretionary expenditure (b)	5,775
Example – Staff training	
Discretionary expenditure (c)	–
Example – enhanced maternity leave	
<b>INVESTMENT – INFRASTRUCTURE</b>	
Mandatory expenditure	111,756
Example – replacement/refurbishment of sewers	
<b>TOTALS</b>	
Customers and communities	50,786
Environment	49,829
Employees	73,676
Infrastructure	111,756
<b>Total</b>	<b>286,047</b>
Mandatory expenditure – expenditure governed primarily by legislation or regulation	
Discretionary expenditure (a) – primary benefit to Wessex Water; secondary benefit to others	
Discretionary expenditure (b) – equal benefit to Wessex Water and to others	
Discretionary expenditure (c) – primary benefit to others; secondary benefit to Wessex Water	
Investment towards sustainability is £286.0m down from £303.4m last year as a result of a reduction in infrastructure investment.	

Source: Wessex Water, *Annual Review 2009*.

The abatement cost (shown in the following tables and charts) relates to these surplus emissions above the reduction path way for an 80% cut between 1990 and 2050.

The financial cost for reaching the target is calculated using the price of £7.50/tonne for carbon dioxide equivalent emissions from electricity, gas, diesel oil, transport, methane and nitrous oxide. This is the price offered by Climate Care to offset carbon dioxide through renewable energy projects and forestry.

**Breakdown of energy CO<sub>2</sub> emissions to air by component type**



Impacts on watercourses	Target 2008-09	Avoidance/abatement cost £'000
Abstraction Priority 2 sites	Meeting Defra guidance on low flows	(£13000)



**Emissions to Air**

The water company is currently meeting its target path of reducing emissions by 60% between 1990 and 2050. However, it will face further challenges in the area of carbon management due to increasing treatment standards requiring more energy intensive methods.

Wessex Water’s energy consumption has climbed through increase of sewage treatment to meet environmental regulation. The company’s carbon dioxide emissions, 95% of which came from consuming energy, has increased significantly in the last few years. The Royal Commission of Environmental Pollution published a report in 2001 that lobbied for a 60% decrease in carbon dioxide emissions from energy use by 2050 to avoid escalating damage to the earth’s environment.

However, and in the long term, Wessex Water aim to be carbon neutral. It is monitoring its emissions of three major greenhouse gases – carbon dioxide, methane and nitrous oxide – compared with the target reduction path in the UK Climate Change Act being an 80% cut between 1990 and 2050.

Wessex Water’s total carbon dioxide equivalent emissions were 179,902 tonnes in 2008-09. This is 52,605 tonnes above a reduction pathway that matches the Climate Change Act’s target.

Source: Wessex Water, Annual Review 2009.

The current options for reducing the company's impact are set out below:

1. Improving efficiency of water & sewage treatment

Wessex Water already monitors sites to identify those whose energy use is higher than benchmark levels. While the company is already considered a leader in this activity, further work could become more attractive if energy prices continue upwards.

2. Renewable energy

Wessex Water met its target for 20% of energy to come from renewable sources by 2005. The next target is for 50% of energy to come from renewable sources by 2020, and ultimately 100%.

3. Process Emissions

The main greenhouse gases process emissions are methane and nitrous oxide. These are, respectively, 23 and 310 times more potent as greenhouse gases than carbon dioxide.

Methane

Water regulation brought about more sewage treatment and thus cleaner rivers and coastal waters, but it also meant more sludge (and therefore more methane) being produced. In recent years, Wessex Water has significantly reduced methane emissions by virtually ending the landfilling of sludge, but it is estimated that its emissions remain at least double that of the 1990 level.

Nitrous oxide

These emissions arise principally from ozonation (used to treat drinking water), denitrification within sewage treatment and spreading sludge on land. The UK industry has started to develop systems for estimating nitrous oxide emissions. Reducing emissions of methane and nitrous oxide to zero is not practicable, given the scale of Wessex Water's sewage and sludge activities. In the long term, carbon offsets might be the only way of completely neutralising these impacts.

4. Transport

Wessex Water's transport fleet – dominated by vans, pickups and tankers – mainly runs on diesel. The carbon dioxide produced is about one twelfth of the carbon dioxide from energy use. While smarter scheduling of vehicle movements can bring about some mileage reductions, the ideal

long term solution would be to have the entire fleet running on non-fossil fuels. This is dependent on both the availability of both suitable vehicles and carbon neutral fuels.

To further encourage proactiveness, Wessex Water has signed up to Fair **Shares**, **Fair Choice** (FSFC), a growing movement of people who are choosing to live and work within a fair share of carbon. Launched in March 2007, FSFC has already attracted over 400 supporters – individuals, businesses, organisations and groups who have signed up to the principle of 'a globally fair and safe carbon share for everyone'. FSFC offers services such as a carbon footprint calculator, a personal carbon budget and a carbon lifestyle coach.

**Cement & Construction**



YTL Cement is the second-largest cement company in Malaysia with a cement production capacity of 6.1 million tonnes p.a. It is the largest ready-mix concrete company in Malaysia, with fully integrated operations across the complete manufacturing value chain, from quarry operations to clinker and cement production, sales and distribution, logistics and ready-mixed concrete.

Its Pahang Cement plant has obtained **ISO 9001** (Quality Management System), **ISO14001** (Environment Management System), **OHSAS 18001** (Occupational Safety and Health Management System) and **ISO/IEC 17025** (Laboratory Accreditation and Management System) Certification since 2001 and is rated **4 Stars** by the Independent Cement Producers Association (ICPA) in London based on the plant's comparative performance in:

- Safety & manpower productivity
- Energy efficiency
- Environmental performance



The **EMS programme** is intended to fulfil a number of objectives, including carrying out the Group's responsibilities as a good corporate citizen by taking a proactive role in adopting environmentally-friendly practices and improving employees' health and safety through the provision of a cleaner and more conducive working environment.

The Group is striving to inculcate a continuous improvement culture within the organisation so as to reduce costs and improve quality, whilst ensuring protection of the environment. These measures were successfully implemented and MS **ISO1400:2004** certification was subsequently officially awarded to its Perak-Hanjoong cement plant in November 2006.



YTL Cement has achieved significant CO<sub>2</sub> Emissions Reductions in Malaysia between 1997 and 2008, as a result of it using Blastfurnace Slag. As a fact, users worldwide have seen that using slag for cement can have a beneficial effect on profitability, as well as avoiding the huge amounts of CO<sub>2</sub> which would otherwise be evolved through limestone decarbonation and thermal energy use during clinker manufacture.

At the Perak-Hanjoong plant, YTL Cement embarked on a number of Operations Improvement Projects with a view to increase production, improve product quality, and reduce costs. All of these projects, including recycling and reuse, has also improved the

energy efficiency of the plant and reduced CO<sub>2</sub> emissions. The modernisation and improvement projects completed at Perak-Hanjoong works include:

- Optimisation of the raw material sources and quality which improved the stability of kiln operation and increased annual clinker production.
- Modern high efficiency separators have been installed on the raw and coal mills, resulting in increased production, improved burnability and reduced electrical power consumption.
- Static inlet grate installed on the PL2 clinker cooler improved the clinker quality and significantly reduced the fuel consumption of the kiln.
- The clinker cooler and its ancillary equipment at PL1 line is being replaced with a modern, efficient and low maintenance design. When the new cooler is commissioned before the end of 2007, the fuel consumption of the kiln will be significantly reduced, clinker quality optimised, maintenance costs reduced and the run factor increased resulting in higher annual clinker production.

YTL Cement has an environmental policy outlining proper waste management procedures and there are inventories on how much industrial waste is generated and reused. There is typically no waste generated through cement production as by products. However, there are a few industrial wastes due to maintenance work such as used or spent refractories, lubricants and burst paper bags.

Most waste is recycled or reused. Waste refractories, burst bags and spent oil are almost 100% recycled. Used refractories are crushed and reused as part placement for the raw materials used in the cement manufacturing. Used oil is reused as chain open lubrication at coal and remix reclaimers, and are also sold to recyclers. Used grease and contaminated gloves go back to the firing stream to become part replacement of fuel and as for burst paper bags, they go as fuel into the firing process.

The company has regional expansion plans and is currently evaluating investment opportunities in Singapore, China, Middle East & Indonesia. The acquisition of the Jin Yuan cement company in China will further complement YTL Cement's existing core business activities and is in line with its expansion strategy.

What is an attractive opportunity is YTL's Cement's potential to generate **carbon credits** and **Certified Emissions Reductions (CERs)**. Activities to use alternative fuels in the Perak-Hanjoong cement plant could become a very interesting CDM project at YTL. Based on preliminary calculations by our carbon credit consultancy, **YTL-SV Carbon**, the project could generate RM2 – 3 million per year in extra revenue from carbon credits. The savings in fuel costs are also significant.

### Express Rail Link



Source: *KLIA Ekspres*.

In 2009, Express Rail Link Sdn Bhd (ERL) launched its "Go Green, Go Lo-Co<sub>2</sub>" campaign in its call inspiring more Malaysians to lead a greener lifestyle. The event was officiated by Datuk Peter Chin, Minister of Energy, Green Technology and Water and newly appointed CEO of ERL, Noormah Mohd Noor.

The express trains are currently the fastest way for passengers journeying to the Kuala Lumpur International Airport (KLIA). KLIA Ekspres and KLIA Transit current ridership has resulted in 3.5 million less car journeys every year saving 23,000 tonnes of CO<sub>2</sub> from polluting the atmosphere.

As part of its campaign, ERL is continuously exploring and adopting green technologies to help its operations run more efficiently. The company has stepped up its green commitment by reducing, re-using and recycling products and materials used within its operations.

The latest initiative by ERL include a new train-washing plant that will use 80% less chemicals, 90% less water and 70% less electricity to maintain its fleet of 12 state-of-the-art, high speed trains. Also recently pioneered was a nine to ten fold lifetime extension of the train wheels.

Thus, ERL recognises its responsibility to protect the environment and to operate in a sustainable manner. It is continually striving to improve its environmental performance in the following areas:

- Air quality
- Energy management
- Noise and vibration
- Waste

It has also risen to the challenge of combating climate change, through the following key initiatives:

- Its new trains are equipped with regenerative braking capability, whereby the traction motors act as generators when braking to save electricity
- Considering energy and greenhouse requirements in its business planning and procurement processes
- Regenerating electricity through renewable sources to power train stations
- Participating in global climate change initiatives such as "World Environment Day" and "Earth Hour"

In 2007, E-MAS has embarked on a "3R Project" jointly with ERLSB to play a part in YTL Corporation Berhad's long-standing involvement and commitment to environmental protection. It is designed to raise the level of environmental consciousness amongst the staff, as well as inspire everyone in joining the fight against global warming.

#### The 3R Project

**Reduce** – Minimise the usage resulting in a smaller amount of waste, or using natural resources wisely through conservation

**Reuse** – Use materials in their original form or pass them to others to use

**Recycle** – Reusable material can be remade into either the same product or new products rather than disposed

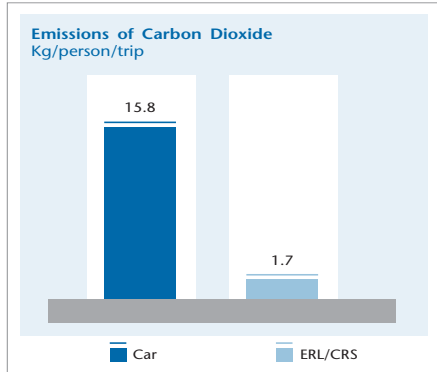
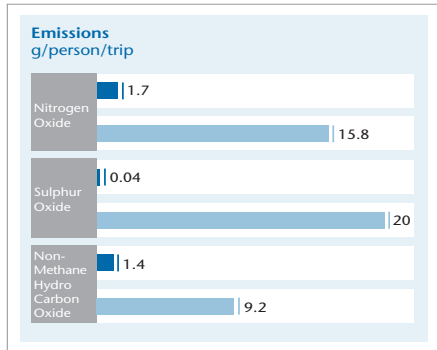
E-MAS has already initiated and embarked in some 3R projects as highlighted below:

- **Modification of station lighting control** – Changing station lighting control from a sensor-based to a timer-based one. Timers are also set to turn off lights during non-operational hours and plans have been made to switch to energy saving lighting
- **Optimising Building air-condition systems** – Identified rooms are fitted with fans and Air-Conditioning operations are limited
- **Train driving based on Energy Saving Profile (ESP)** – Train Drivers (OTDs) to drive train based on ESP driving profile
- **Recycling of consumables** – Train tickets, used papers, and disposed items, are recycled

From an environmental perspective, the emission of greenhouse gases (GHGs) is a critical issue for all modes of transport. The following diagrams show a comparison of emissions between the REL/CRS system and a car over a distance of 60 kilometres, approximately the distance between KL Sentral Station and the Kuala Lumpur International Airport (KLIA). It therefore makes sound common sense as well as environmental sense to take the trains to KLIA as they emit less carbon dioxide and are thus less polluting.

The following chart shows the emissions for:

- Nitrogen Oxide
- Sulphur Oxide
- Non-Methane Hydro Carbon Oxides



Source: E-MAS.

Visit [www.kliaekspres.com/erlsb/Home/ERL GoesGreen/tabid/195/Default.aspx](http://www.kliaekspres.com/erlsb/Home/ERL GoesGreen/tabid/195/Default.aspx) for more information.



## Be Part of The Solution

YTL believes everyone has a part to play in protecting our earth and the environment.

Every time we flip a switch, take a hot shower or drive a car, we release more carbon dioxide that heats up the atmosphere. If everyone went on a low carbon diet, we could lose a bit of weight and even save money but ultimately, we'd end up saving the planet. Want to do something to help stop global warming? Here are 10 simple things you can do.

### THE LOW CARBON DIET

Every time we flip a switch, take a hot shower or drive a car, we release more carbon dioxide that heats up the atmosphere. If everyone went on a low carbon diet, we could lose a bit of weight and even save money but ultimately, we'd end up saving the planet.

**Rule #1: Finish all your food.**

We dispose around one-fifth of the fruits and vegetables we buy over a year. If we finished all our food, lower market demand would reduce production and transport related CO2 emissions. So don't buy more perishables than you can eat in a week. As mum says, "Finish all your veggies."



**Rule #2: Bin your trash bin for a week.**

As an experiment, avoid disposing anything for 1 week. Drop paper & metal waste at your local recycling centre. Convert food scraps into compost or a treat for a neighbour's pet. Reuse plastic items. After a week, we'd have learned to use the trash bin sparingly.



**Rule #3: Feeling blue? Take a cold shower.**

A soak in the bath averages 80 litres of water while a 5-minute shower uses only about 35 litres. What's more, if you're feeling a little under the weather, recent studies prove that short, cold showers drive the blues away.



**Rule #4: Jog to the gym.**

We often choose our gyms based on proximity to the place we work or live. If your gym is a short hop away, consider jogging over. After a few months, you might not even need to go to a gym altogether.



**Rule #5: Switch off standby modes.**

Electrical appliances left on standby mode slurp up energy in order to support features such as timers, clocks, memory and remote "on" and "off" switches. If you don't want to incur an additional 5% to 13% on your household electricity bill, just use your finger. Switch it off.



**Rule #6: Plastic bag? No, thank you.**

Decline plastic bags at shopping counters if you can. Use heavy duty canvas bags instead and keep one handy in your car. If shopping for only a few items, use your purse, pockets or hands. When the demand stops, we can finally bag the plastic bag.

**Rule #7: Enjoy the morning paper on the way to work. Carpool.**

Carpooling has many perks. You'll save on petrol and toll charges. You're less likely to be stressed out (if you take turns driving) and more likely to be productive at work. In fact, you'd have already finished reading today's paper.

**Rule #8: Feed your plants.**

Recipe to convert waste into compost. Put aside fruit & veggie scraps. Add tea bags & coffee grounds. Toss in crushed eggshells, shredded paper & soft cardboard. Mix with garden & grass clippings. Leave aside in your garden for 3 - 6 months.

**Rule #9: Support your countryman. Buy local.**

Vans, lorries and planes cover billions of kilometres a year transporting food, releasing vast amounts of CO2. So opt for local fruits instead of imported ones. Seafood from Klang instead of air-flown from Alaska. It's good for our economy and Mother Nature.

**Rule #10: Harvest the sky.**

We all love a freebie. And last we checked, rain water is free. If you don't want to install rain harvesting equipment, just place empty buckets in position. Use to wash your car, clean up bathrooms and water your indoor plants.



## Find Out More

---

Be Part of Our Community  
[www.ytlcommunity.com](http://www.ytlcommunity.com)  
[www.ytlatinumplus.com](http://www.ytlatinumplus.com)

Supporting the Arts  
[www.klpac.com](http://www.klpac.com)  
[www.starhillgallery.com/muse.asp](http://www.starhillgallery.com/muse.asp)

Education and the Next Generation  
[www.ytl.com.my/jobs.asp](http://www.ytl.com.my/jobs.asp)  
[www.ytlcommunity.com/scholarship](http://www.ytlcommunity.com/scholarship)

Water and Our Business  
[www.wessexwater.co.uk/sustainability](http://www.wessexwater.co.uk/sustainability)  
[www.wessexwater.co.uk/strikingthebalance2008](http://www.wessexwater.co.uk/strikingthebalance2008)

Energy and Our Business  
[www.electranet.com.au](http://www.electranet.com.au)

Sustainable Planning & Design  
[www.birdisland.com.my](http://www.birdisland.com.my)  
[www.maple.com.my](http://www.maple.com.my)  
[www.starhillgallery.com](http://www.starhillgallery.com)  
[www.lot10.com.my](http://www.lot10.com.my)

Express Rail Link and Our Business  
[www.kliaekspres.com](http://www.kliaekspres.com)

Jungle Trekking and Our Resorts  
[www.pangkorlautresort.com/activities/jungle.htm](http://www.pangkorlautresort.com/activities/jungle.htm)

Climate Change Week  
[www.ytlcommunity.com/climatechange](http://www.ytlcommunity.com/climatechange)

Our Carbon Credit Consultancy Business  
[www.ytl-svcarbon.com](http://www.ytl-svcarbon.com)

Our Environmentalist Friends  
[www.nature.org](http://www.nature.org)  
[www.rareconservation.org](http://www.rareconservation.org)  
[www.wwf.org.my](http://www.wwf.org.my)  
[www.reefcheck.org.my](http://www.reefcheck.org.my)  
[www.mns.org.my](http://www.mns.org.my)  
[www.trees.org.my](http://www.trees.org.my)

Our Professional Memberships  
[www.my-icrm.org](http://www.my-icrm.org)

Our Sustainability Report 2006, 2007 & 2008  
[www.ytlcommunity.com/climatechange](http://www.ytlcommunity.com/climatechange)

Our Awards for Sustainability  
[www.ytlcommunity.com/climatechange](http://www.ytlcommunity.com/climatechange)



[www.ytlcommunity.com](http://www.ytlcommunity.com)

YTL CORPORATION BERHAD 92647-H

11th Floor

Yeoh Tiong Lay Plaza

55 Jalan Bukit Bintang

55100 Kuala Lumpur

Malaysia

Tel • 603 2117 0088

603 2142 6633

Fax • 603 2141 2703