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YTL CORPORATION BERHAD 92647-H

sustainability report 2011



**YTL  
CORPORATION  
BERHAD** 92647-H

the journey continues...

sustainability report 2011



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



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### Dear Stakeholder,

You may have observed that our world is changing at an unprecedented rate. Global consumption of natural resources could almost triple to 140 billion tons a year by 2050 unless nations take drastic steps, as the United Nation issued a warning this year. Weather disasters in the poorest nations have trebled since the 1980s and carbon emissions have also reached highest ever levels, with unpublished estimates from the International Energy Agency (IEA) revealing that the world economy's return to growth in 2010 coincided with a 1.6 gigatonne rise in carbon dioxide emissions, the highest ever recorded.



**TAN SRI DATO' (DR) FRANCIS YEOH SOCK PING**

PSM, FICE, CBE, SIMP, DPMS, DPMP, JMN, JP

*Managing Director,*

*YTL Corporation Berhad*

Recent headlines this year in 2011 also included the EU and US debt crises, oil prices reaching two-and-a-half year highs; Japan dealing with a nuclear power meltdown; the one-year anniversary of the Gulf Oil disaster; and the International Energy Agency (IEA) issuing a report calling for more aggressive build-out of clean energy to offset declining oil production and climate change. So we see climate change has become a real and very serious problem, but it's only one of a suite of problems the World is now facing – everything from peak oil to volatile markets to record-high food prices to the need to bring genuine development to half the world's people that live on less than US\$2 a day, and to the frightening reality that we are losing every major ecosystem on the planet.

So how are Businesses faring? Business is probably the only institution on the planet that can move fast enough and that is intelligently managed to be able to grasp opportunities despite the state the world is in. Experts point out that though corporations control the use of massive resources, by changing their habits, they can make a much bigger difference than any individual possibly can. The good news is that most business leaders are beginning to understand the importance of taking action to reduce their companies' carbon footprint on the environment. There is now proof from Wall Street and Goldman Sachs showing that companies that are leaders in environment, social and good governance policy have 25 percent higher stock value than their less sustainable competitors.

Research has also shown that even in the economic collapse since 2008, sustainability leaders have the fastest-growing stock value and are well protected from value erosion, even in a down economy with more sustainable companies having an average market capitalisation of US\$650 million more than their less sustainable competitors. Climate capitalism is therefore becoming good for the bottom line, with corporate spending on sustainability estimated to double in 2013 from current levels, sparking a massive market expansion as companies increasingly see the business value of investing in the Environment.

At its best, business can deliver the creative solutions that the world desperately needs – low carbon prosperity for a planet that will have an estimated nine billion inhabitants by 2050.

At YTL, I am pleased that we have adopted the "Four Cs" of corporate environmental stewardship:

- (1) Conserve Energy
- (2) Convert to Lower Carbon Energy
- (3) Choose Quality Offsets
- (4) Call for Action



Meanwhile, the concept of Sustainability is increasingly seen as a need-to-have by corporate Boards and CEOs, rather than a nice-to-have. Sustainability carries with it a range of quantifiable, bottomline benefits that enhance competitiveness and resource efficiency. I am pleased that within the YTL Group, we have established a committed "YTL Group Sustainability Committee" dedicated to looking at important environmental matters from energy efficiency to carbon mapping and overall stewardship of sustainability within our Organisation.

The vision here is for Directors, Employees and Agents of the Group to conduct themselves in a manner that always meets and regularly exceeds expectations of sustainable practices through the mastering of three languages – the language of God, Man and Machine. The policy applies to the entire YTL Group of Companies and has been formulated in order to streamline and unify the Group's Sustainability Policy across all business units.

I believe every company is an energy company – or will be one soon – as it may only be a matter of time until energy management programmes become the norm. The sooner companies have strategies and actively manage their energy use, the faster they will succeed in gaining a number of advantages including better savings, a better bottom line, greater customer loyalty, lower business risk, enhanced competitive advantage and company-wide awareness of sustainability. Executives now understand that not only can they afford to go green, they cannot afford not to. And this is our stance at YTL.

One of our innovative “Calls for Action” comes in the form of our flagship educational campaign, **Climate Change Week**, which we pioneered and have been hosting since 2007. Designed to educate and raise public awareness towards the critical issue of global warming, it aims to raise environmental consciousness amongst Malaysians, inspiring them to be part of the solution to the urgent issue of global warming.



*Earth Hour 2011 @ Orchard Road, Singapore*

On 26 March 2011, YTL also celebrated its third **Earth Hour**, which saw 36 of our subsidiaries and properties switching off their lights for more than an hour in respect of this global movement. Our Group's iconic landmarks and establishments, including several in Kuala Lumpur, Singapore, Bali, Phuket and Japan, switched off their lights from 8.00 p.m. to 9.30 p.m. (keeping to the theme of “60+” and going beyond the Hour) in a move that underlines our belief in the collective power of individuals in reversing the tide of climate change.

In Kuala Lumpur, celebrations were held at Lot 10's “Forest in the City” Rooftop and over in Singapore, the popular shopping district of Orchard Road was transformed into a “sea of candles” during the inaugural “Celebrate Earth Hour @ Orchard 2011”, where YTL Corporation was the Presenter Sponsor of the inaugural event, along with the Organiser, Orchard Road Business Association (ORBA) and the World Wide Fund for Nature (WWF). Here, members of the public were treated to an evening of street celebrations in a bid to raise public awareness on environmental conservation. In response to the devastating earthquake in Japan and ensuing tsunami, staff and volunteers from YTL and Starhill Global REIT also worked together to accept donations on behalf of the Singapore Red Cross for the Japan Disaster 2011 Fund, strengthening the significance of “going beyond the hour” this year.

In 2011, milestones of YTL's corporate responsibility and sustainability achievements include YTL Corporation, Starhill Global REIT & Orchard Road Business Association (ORBA) receiving the “Special Award for the Best Party” at the World Wide Fund for Nature (WWF) Earth Hour Singapore 2011 Participation Awards, and YTL-SV Carbon winning the Award for “Best Carbon Markets Brokerages, Asia” at the World Finance Carbon Market Awards 2011. YTL Corporation and YTL Cement also won the Silver Award for “CSR Leadership Excellence” and Bronze Award for “Best Product Excellence”, respectively, at the Global CSR Awards 2011. In addition, YTL Corporation was awarded the “Corporate Platinum Award” by Singapore's Community Chest Awards 2011<sup>1</sup> saluting individuals, companies and organisations with a selfless propensity to help those in need.



<sup>1</sup> The Company Chest in Singapore is a fund-raising arm of the National Council of Social Service with a purpose to ensure that every person within the society has the opportunity to live a life of dignity to his or her fullest potential.

YTL has also signed up to support and be part of both the **Copenhagen Communiqué on Climate Change**, the **Cancun Communiqué on Climate Change**, and the **2°C Challenge Communiqué**, widely recognised as the definitive progressive statements from the international business community. The Copenhagen Communiqué – issued ahead of the United Nations Climate Change Conference in December 2010 by business leaders of over 950 companies from over 60 countries – calls for an ambitious, robust, and equitable global deal on climate change that responds credibly to the scale and urgency of the crises facing the world today.

The Cancun Communiqué on Climate Change built on the significant momentum created by the Copenhagen Communiqué, making it clear that the case for a comprehensive international framework to tackle climate change still stands and is increasingly urgent, and urging governments to both redouble their efforts to achieve this framework and also take necessary and appropriate mitigation actions in parallel with such efforts. The signing of the Cancun Communiqué demonstrates the progressive consensus within the international business community in support of an ambitious, robust and equitable deal on climate change survives Copenhagen, which was taken a step further with the signing of the 2°C Challenge Communiqué.

The 2°C Challenge Communiqué calls for urgent action to stabilise global warming to less than 2°C, as was agreed in Cancun. While acknowledging the progress made by previous Communiqués on Climate Change, the 2°C Challenge Communiqué stresses that unless checked by critical measures, the 2°C boundary will be crossed at the current rate of progress, and urges governments to adopt national policies and measures without delay, even before a new international treaty is established.

These statements are initiatives of The Prince of Wales's Corporate Leaders' Group on Climate Change which is run by The University of Cambridge Programme for Sustainability Leadership, and collectively reinforce that world leaders need to redouble their efforts to agree on such a deal and also take appropriate measures to tackle climate change today.

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 first-hand how sustainability programmes and policies have reaped outstanding results. 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.

Businesses are increasingly taking steps to safeguard their future energy security by investing in their own renewable generation capacity and at YTL, we are pleased that we have not only established an in-house Clean Development Mechanism (CDM) consultancy – we are also innovating.



*The Bio-Bug, developed by Wessex Water subsidiary GENeco, runs on biogas generated from the sewage treatment process*

Our subsidiary in the UK, Wessex Water, and its subsidiary GENeco Limited, for example, has developed a VW Beetle vehicle that is powered by methane gas derived from human waste, the first such test done in the United Kingdom (UK). Named the “**Bio-Bug**”, the vehicle runs on methane gas generated during the sewage treatment process. Waste from just 70 homes in Bristol is enough to power the Bio-Bug for a year, based on an annual mileage of 10,000 miles. The Anaerobic Digestion and Biogas Association (ADBA) claims the launch of the Bio-Bug proved that biomethane from sewage sludge could be used as an alternative fuel for vehicles.

This bodes well for us, given that renewable energy sources are expected to contribute up to 80 percent of global energy supply by 2050, according to a new report published by the Intergovernmental Panel on Climate Change (IPCC). Climate change is also featuring prominently on the legislative agenda across the 16 major world economies, hence the need to look seriously at alternative energy technologies such as biogas.

Over the previous decades, we can observe that the relationship between companies and NGOs have steadily evolved from conflict to cooperation. So in addition to investing in green technology, we are also continuing our ongoing support towards our long-term conservation partners. As stewards of our good earth, YTL has long supported conservation through international groups like **The Nature Conservancy** and **Rare**



**Conservation**, as well as local environmental organisations including **WWF-Malaysia**, **Malaysian Nature Society (MNS)** and **Treat Every Environmental Special (TReES)**.

This year is recognised as the United Nations Environment Programme’s “International Year of Forests 2011” and we are proud to continue our support for these environmental organisations which we have been long-term supporters of and whom are doing great work in preserving our world’s forests and carbon sinks. Studies have shown that forests soak up a third of fossil fuel emissions, playing a larger role in the Earth’s climate system than previously suspected for both the risks from deforestation and potential gains from regrowth. Estimates reveal that tropical forest regrowth is removing an average of 1.6 billion tonnes of carbon each year, with all the world’s forests combined acting as a net sink or sponge for 1.1 billion tonnes of carbon, which is the equivalent of 13 percent of all the coal, oil and gas burned across the planet annually.

In June 2010, we gifted **Rare Conservation** with US\$2 million to establish the “**YTL Fellowship for a Rare Planet**”, with a focus on educating “Rare Pride” Campaign Managers all around the world to champion conservation in local communities, globally and beyond. In the first year of the four-year grant, YTL Fellows and the Pride Campaigns they lead have already impacted over 20% of 205 Pride Campaigns launched since the early 1980s, making significant strides towards lasting conservation impact in China, Indonesia, Timor Leste, and the Philippines. Rare estimates the YTL Fellowship will directly impact approximately 2,000,000 of the world’s most underprivileged that are most vulnerable to climate change and depletion of the natural resources upon which they depend.

Our support for **Reef Check Malaysia** also continues with marine conservation work focused on both the East and West coasts of Malaysia. With climate change and rising temperatures causing increasing levels of coral bleaching on the reefs in coastal areas of Malaysia, we believe it is our duty to protect the reefs and its biodiversity the best we can despite the harrowing news and reports on the state of our reefs.



Personally, I am also proud to serve in several non-profit organisations that make leadership in sustainability possible, namely **The Nature Conservancy (TNC)**, **The Institute of Corporate Responsibility Malaysia (ICRM)** and the **World Economic Forum (WEF)**. 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 have 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 US\$500,000 to support conservation efforts in forest protection and coral reef conservation within South East Asia, primarily in Indonesia. I am also the Chairman at YTL-SV Carbon, YTL's in-house carbon credit and Clean Development Mechanism (CDM) Consultancy, which advises companies on processes involved in becoming clean and green.



Recently, I was made a Primus Inter Pares Honouree of the **"2010 Oslo Business for Peace Award"**, awarded for advocacy of socially responsible business ethics and practices both at home and around the world. The Award was conferred by a panel of Nobel Laureates in Oslo, home of the Nobel Peace Prize. I also received the **"Corporate Social Responsibility Award"** at CNBC's 9th Asia Business Leaders Awards 2010 the same year. The Corporate Social Responsibility Award recognises outstanding contributions to the arts, education, the environment and community development, and is bestowed on the candidate who has the ability to translate a company's success into benefits for the community and who makes societal impact a corporate priority.

This year, I also became the first Asian **Chairman of Judges at the Ernst & Young World Entrepreneur Of The Year Awards 2011**. Regarded as one of the most prestigious global entrepreneurial awards, it is a culmination of respective national level "Entrepreneur of the Year" Awards that took place in over 40 countries. These countries represent more than 90% of the global economy. For these, I give all thanks and praise to God and Jesus for the Glory.

*Tan Sri (Dr) Francis Yeoh (right) receives the "2010 Oslo Business for Peace Award" from Per L. Saxegaard, Chairman of the Business for Peace Award Foundation*



*Tan Sri (Dr) Francis Yeoh at CNBC's 9th Asia Business Leaders Awards 2010 where he received the "Corporate Social Responsibility Award"; pictured with (L-R) Jaime Augusto Zobel De Ayala, Chairman of Ayala Corp, Sir Gordon Wu, Chairman of Hopewell Holdings Ltd, and Maria Bartiromo*



(R-L) Jack Cowin, Executive Chairman of Competitive Food Australia Ltd, Yves Guillemot, CEO of Ubisoft, Tan Sri (Dr) Francis Yeoh, Managing Director of YTL Corp and 2011 World Entrepreneur of the Year Judging Chairman, Dianne Foreman, CEO of Emerald Group Ltd, Jose Luiz Alquieres, President of Commercial Association of Rio de Janeiro and Brian Long, Managing Partner of Atlantic Bridge Ventures



Tan Sri (Dr) Francis Yeoh and his daughter Ruth Yeoh, Executive Director of YTL Singapore Pte Ltd at the 9th Asia Business Leader Awards 2010

I am also a keen supporter of the Arts and an appointed patron of the **International Friends of the Louvre**, which raises awareness of this historical museum's collections and museum expertise. In addition, 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. I have also been included in **Forbes Asia's "Heroes of Philanthropy"** list in 2010.



Besides the arts, YTL is also committed to supporting education and educational programmes through innovation. **YTL Communications Sdn Bhd (YTL Comms)**, for example, aims to bring communications to the masses through its Worldwide Interoperability for Microwave Access (WiMAX) operations. In July 2010, YTL Comms entered into a memorandum of agreement with local universities Universiti Teknologi Malaysia and Universiti Tunku Abdul Rahman to provide a campus-wide 4G network for their campuses in Skudai, Johor, and Kampar, Perak, respectively.

## The fastest 4G mobile Internet with voice

YTL Communications is providing campus-wide 4G mobile Internet with voice to students across Malaysia.



Partnerships such as these will enable students to enjoy high-speed, wireless broadband access at any time and from anywhere within the campuses. Every student will get converged data and voice services totalling 300 megabytes per user, per month, for a period of 3 years. Once the infrastructure is up and running, the universities will be working closely with YTL Comms to nurture the development of Internet applications in their technology degree courses.

In addition, YTL Comms has also launched its **YES 4G network**, the most affordable 4G Mobile Internet service in Malaysia. The network is being installed in universities and colleges and has extended to towns and rural communities, as well as throughout the major cities and urban centres. Recognising the importance of universal connectivity, the YES 4G network will give everyone an opportunity to be connected at a very affordable price. The mission here is to make high speed communications and technology available to the masses.

Going further, we are investors of both the **Asian Renewable Energy and Environment Fund (AREEF)** and the **Renewable Energy and Environment Fund (REEF)**, the latter of which was launched during YTL's second Climate Change Week in 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 Sdn Bhd (YTL-SVC)**, 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 the Clean Development Mechanism (CDM) business. Currently, YTL-SVC is 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 CDM. YTL-SVC recently won the Award for "Best Carbon Markets Brokerages, Asia" at the **World Finance Carbon Market Awards 2011**.

Malaysia currently ranks fifth in the world for CDM Projects based on a study in June 2010, and to stimulate the development and use of renewable energy and energy-efficient activities and technologies, the Malaysian Government has introduced fiscal incentives such as pioneer status for corporations, investment tax allowance and import duty and sales tax exemption for equipment used in energy conservation.

Overall, the global carbon market was worth about US\$141.9 billion in 2010 and between 2005 and 2008, carbon markets more than doubled in value every year; growth slowed to just 6 percent in 2009 and the market contracted in 2010. But although those markets are losing steam, global warming is still picking up its pace, with 2010 being the warmest year on record. Having said that, the industry believes that the voluntary carbon market will continue improving in 2011 as the economy rebounds and the market matures.

Overall, I strongly believe achieving a truly sustainable economy will mean managing institutions so they are not just efficient and innovative, but also restorative of human and natural capital. By buying time through efficiency and good housekeeping, we believe that at YTL, we can certainly do a better job of delivering quality of life and become more profitable. The vision of "**People = Planet = Profit**" is achievable if society works cooperatively.

Remember, the economy is a wholly-owned subsidiary of the environment, and not the other way around.

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  
*Managing Director,*  
*YTL Corporation Berhad*



The diverse nature of the industries in which we do business enables us to touch the lives of millions of people across the globe. The YTL Group also employs approximately 7,800 people around the world. This global stakeholder base means that we have responsibilities to our colleagues, customers and suppliers, the environment and the communities where we live and work.

The YTL Group has embraced a culture of socially responsible and sustainable operations ever since our humble beginnings in 1955. Starting out as a small construction company involved in national infrastructure projects, our core competencies have since expanded to include utilities, cement manufacturing, construction contracting, property development and investment, hotel development and management, and information technology (IT).

Social responsibility is one of the YTL Group's key values and something we take very seriously. Acting responsibly is fundamental to how we carry out every aspect of our business. We strive to improve lives everywhere we operate, aiming for a healthy, safe, and sustainable environment and considering the needs of the present generation while, at the same time, anticipating the needs of future generations.

We believe effective corporate social responsibility can deliver benefits to our businesses and, in

turn, to our shareholders by enhancing good management practices, internal control systems, risk management, accountability, business trust, and integrity for the benefit of all our stakeholders.

Our Group understands that today's 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 from the risks these challenges may bring about. This shared vision fuels our commitment to operating in a responsible and sustainable manner, and to give back to the societies and people who form an integral part of our journey.

Given the diversity of the Group's activities and geographical operations, our ongoing commitments generally fall under the following broad areas that have formed the pillars of YTL's sustainability initiatives over the years:-

- **Promotion of arts and culture;**
- **Supporting education and community development; and**
- **Protection of the environment**

Our initiatives in these areas are dealt with in turn in this Sustainability Report. References in this report to "YTL", the "YTL Group" or the "Group" are to YTL Corporation Berhad (YTL Corp) and its subsidiaries.

## AWARDS & ACCOLADES FOR SUSTAINABILITY

The YTL Group is honoured to have been the recipient of awards from various industry bodies. Recent citations include:

- Wessex Water – Winner of two “Green Apple Awards” 2011 for “Environment Best Practice”
- YTL Corporation Berhad and YTL Cement Berhad – Silver Award for “CSR Leadership Excellence” and Bronze Award for “Best Product Excellence” respectively at the Global CSR Awards 2011
- YTL Corporation Berhad, Starhill Global REIT & ORBA – “Special Award for the Best Party” for the inaugural “Celebrate Earth Hour @ Orchard” Initiative at World Wide Fund for Nature (WWF) Earth Hour Singapore 2011 Participation Awards
- YTL-SV Carbon Sdn Bhd – Award for “Best Carbon Markets Brokerages, Asia” at the World Finance Carbon Market Awards 2011
- YTL Corporation Berhad – “Corporate Platinum Award” by Singapore’s Community Chest Awards 2011
- PowerSeraya Limited – “Merit Award” at Singapore Environmental Achievements Awards (SEAA) 2011
- YTL Corporation Berhad – “Green Energy Company of the Year” at Frost & Sullivan 2010 Malaysia Excellence Awards
- Syarikat Pembinaan Yeoh Tiong Lay (SPYTL) Sdn Bhd – “Building Construction Contracting Company of the Year” at Frost & Sullivan’s 2010 Malaysia Green Excellence Awards
- YTL Corporation Berhad – Bronze Award for “CSR Leadership Excellence” at Global CSR Awards 2010
- PowerSeraya Limited – “Most Socially Responsible Power Company of the Year” at Asia Power & Electricity Awards 2010
- Wessex Water Limited – “Green Apple Award” and “Outstanding Award at Wiltshire Wildlife Trust Corporate Green Awards” 2010/2011
- YTL Corporation Berhad – Shortlisted for ACCA Malaysia Sustainability Reporting Awards (MaSRA) 2010
- YTL Corporation Berhad – Silver Award for “CSR Leadership Excellence” at Global CSR Awards 2009
- YTL Corporation Berhad – Shortlisted for ACCA Malaysia Sustainability Reporting Awards (MaSRA) 2009
- Starhill Global REIT – “Award for the Best Engagement Activities” at World Wide Fund for Nature (WWF) Earth Hour Singapore 2009 Participation Awards
- Wessex Water Limited – The “Queen’s Award for Enterprise” for Continuous Achievement in Sustainable Development 2008
- YTL Corporation Berhad – “Commendation for Social Reporting” at the ACCA Malaysia Environmental and Social Reporting Awards (MESRA) 2007
- YTL Corporation Berhad – “Best Social Reporting in an Annual Report” at the ACCA Malaysia Environmental and Social Reporting Awards (MESRA) 2006



*Promotion of Arts  
& Culture*





“ All great art is an affirmation of life that brings us closer to the Divine: the wonderful sights, sounds and colours of life you see around you; the myriad artistic expressions which constantly remind us that we are indeed God’s supreme creation, gifted with the ability to respond, appreciate and empathize with the emotions of our fellow human beings. If art is an imitation of life, then surely by pondering and appreciating a wondrous work of art, we can catch a glimpse of life and an epiphany of its creation that will surely bring us closer to the Divine. ”

– **Tan Sri Dato’ (Dr) Francis Yeoh Sock Ping, CBE, FICE,**  
*Managing Director of YTL Corporation Berhad, at the Starhill Arts Festival*

The YTL Group is a passionate supporter of the arts and is dedicated to encouraging the development of our own arts and cultural scene in Malaysia, to showcase the uniqueness of our heritage and to provide an alternative medium for artistic expression and communication.

#### STARHILL GALLERY ARTS FESTIVAL



*Tan Sri (Dr) Francis Yeoh and Dato' Sri Dr Ng Yen Yen, Minister of Tourism, Malaysia*

In September 2010, YTL hosted a myriad of environment-themed art exhibitions in its annual Arts Festival held at its Starhill Gallery premises. The **Starhill Gallery Arts Festival 2010** featured an eclectic collection of art pieces from local and international artists, with the grand finale of the Festival celebrated in collaboration with the Ministry of Tourism, Malaysia, at a Gala Dinner at Shook! Restaurant in Starhill Gallery. The Gala Night, which also marked the finale of the first ever Malaysian Contemporary Art Tourism (MCAT) festival saw Guest of Honour Dato' Sri Dr Ng Yen Yen, Minister of Tourism Malaysia, Tan Sri (Dr) Francis Yeoh, Group Managing Director of YTL Corporation Berhad, Dato Jimmy Choo, Malaysian Tourism Ambassador and Julian Hyde, General Manager of Reef Check Malaysia, getting together in the name of art and conservation.



*(L-R) Jovian Mandagie, Sazzy Falak, Ning Baizura, Tan Sri (Dr) Francis Yeoh, Dato' Sri Dr Ng Yen Yen, Jimmy Choo, Eric Quah and Melvin Lam*

Bringing its passion for art and the environment together, the highlight of the evening was the "Starfish Art Charity Auction" in support of Reef Check Malaysia. The auction served to raise funds in aid of the conservation efforts of Malaysia's beautiful beaches and coral reefs. A total of 20 Starfish sculptures were painted by prominent personalities such as Tan Sri (Dr) Francis Yeoh, Dato' Jimmy Choo, Datin Azrene Abdullah, Eng Tay, Jailaini Abu Hassan, Eric Quah, Tajuddin Ismail, Melinda Looi, Melvin Lam, and Reef Check Malaysia Trustees, Ruth Yeoh and Ning Baizura, among others.

At the end of the night, a total of RM124,500 was raised during the auction. A silent auction was also carried out on forty other Starfish art pieces submitted by members of the public. In addition, Dato' Sri Dr Ng Yen Yen and Tan Sri (Dr) Francis Yeoh also presented prizes to the Top Six Award Winners of the first nationwide "Starhill Gallery Visual Arts Awards (VAA) 2010" who each received RM5,000 and a certificate of recognition.







*Poster of Starhill Gallery Arts Festival 2011*

Starhill Gallery's Art Festival 2011 was held from 15 August – 30 September 2011 in conjunction with the 1Malaysia Contemporary Art Tourism (1MCAT) 2011 and under the auspices of the Ministry of Tourism, Malaysia. An integral part of the festival is the Starhill Gallery Visual Art Awards (VAA) which promotes Malaysian contemporary art by providing a creative platform for young, emerging artists to showcase their talents. The theme of this year's painting competition was "Inspiration of Tomorrow" which attracted 30 entries from the nation. An exhibition of these paintings were held on Adorn Floor in Starhill Gallery and reservations to purchase selected paintings on sale were open to the public throughout the festival, with 10% of proceeds from final sales donated to House of Joy, a Home for under-privileged children in Malaysia, in support of art-related activities. Among the 28 qualifying submissions received, the top three entries were selected to win cash prizes of RM10,000 each.

In support of art activities for underprivileged children, artist Susanna Goho-Quek from House of Suzie Wong also hosted a special art lesson for underprivileged children from the House of Joy on 24 September 2011 in Starhill Gallery. An established children's art educator, author and illustrator, Susanna Goho-Quek is also the founder of the ImpArt Programme which trains underprivileged teenagers to become apprentice art instructors for younger children.

## THE KUALA LUMPUR PERFORMING ARTS CENTRE (KLPAC)

Opened in May 2005, KLPac is Malaysia's only fully-integrated performing arts centre, located at the Group's Sentul Park in Kuala Lumpur. KLPac is the result of a strategic partnership between Yayasan Budi Penyayang, YTL Corp and The Actors Studio, under the patronage of the late Y.A.B Datin Paduka Seri Endon Mahmood. It was built for the common goal of nurturing and developing the performing arts in Malaysia, and caters to a broad spectrum of artistes and audiences with its diverse artistic and educational programs.

Since its inception, KLPac's calendar has 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. The centre's 70,000 square feet of space houses facilities including a 500-seater main theatre, a 200-seater experimental theatre, nine studios, an IndiCine theatre for independent film, a set construction workshop, and a café and bar area.



*Panoramic view of KLPAC's 500-seater main theatre, Pentas 1*



*Dusk at KLPAC*

### Fundraising for Japan's Earthquake Victims

From 30 March to 3 April 2011, KLPac, along with the play's cast, decided to raise funds for the Japan earthquake victims through *Nightlife Creatures*, a Japanese play by Yoichi Kobiyama performed in Chinese for local audiences. Special fundraising tickets were sold at RM50 each or RM10,000 per night (for 190 tickets). 100% of the sales from these fundraising tickets were channeled to a suitable NGO in Japan to aid relief and rehabilitation work.

#### Recent events hosted at KLPac:

*Act the Play, Play the Act – Beginner's Acting Course with Seng Soo Ming*

*Actor as Creator III – From Actor to Character with Seng Soo Ming*

*A Darker Shade of Red*

*KLPac Open Day Arts Festival*

*Aku Cinta XXX 2011*

*KLPac's Theatre for Young People (T4YP) Season 2011*

*Bollywood Dancing For Beginners by Shobana Sahajananan*

*Live @ The Actor's Studio at KLPac*

*CARTOON by Steve Yockey*

*Malaysian Composers Concert Series 2011*

*Causeway EXchange Festival Visual Arts Exhibition*

*Monster Series I: Gila-gila to the Moon*

*Causeway EXchange Festival Films*

*Paul Loosley's George & Oscar on Film*

*Causeway Exchange: Food, Sex and Death*

*Script & Staging for Actors with David Lim*

*Causeway Exchange: Festival Literary Arts*

*Shakespeare Demystified*

*Causeway Exchange: Festival Theatre*

*Short+Sweet Malaysia 2011*

*Fantastical Strings*

*Silent Cry Photography*

*Fragile presented by JS Dance Theatre*

*The Moon Speaks For My Heart – Fundraising Gala Evening hosted by National Cancer Society Malaysia*

*Gems*

*Hands Percussion presents Knocking*

*The Real Inspector Hound  
Traditional Malay Gamelan Workshop by Ezanin Mazlan*

*Heart & Soul Charity Concert organised by Hospis Malaysia and supported by the Philharmonic Society of Selangor*

*World's Best Movies @ Indicine*

*Introduction to Cantonese Opera with Madam Kam*

*.....and many more.*

## School Holiday Programmes

### TAS Academy @ KLPac

TAS Academy @ KLPac is an intensive Children's and Teenager's Theatre Programme which ran from 30 May to 8 June in 2011. Youths who signed up for the Programme got to experience acting, dancing and performances with some of Kuala Lumpur's most popular directors and choreographers including Christopher Ling, Mark Beau de Silva, Kimmy Kiew, Kelvin Wong, Qahar Aqilah and Lex Lakshman in the two-week fun-filled programme.

Additional School Holiday Programmes at KLPac this year included:

*Intensive Arts Programme for Young Children (3 – 6 Years of Age)*

*Intensive Children's and Teen Theatre Programme (7 – 12 Years of Age)*

*Hip Hop Dance Workshop (Beginner's Level) with Coery Sik and Caprice Fong*

*Speak Up! With Elaine Foster (A confidence building and performance workshop)*

## SINGAPORE DANCE THEATRE

YTL has also been a patron sponsor of Singapore Dance Theatre and its Ballet Recitals for three years. A recent performance entitled *Masterpiece in Motion – Tour to Malaysia* was held on 29 and 30 April 2011 at the Kuala Lumpur Performing Arts Centre (KLPac).

Visit [www.klpac.org](http://www.klpac.org) for more details.



## THE ACTOR'S STUDIO AT THE ROOFTOP, LOT 10

Located at the newly-renovated Lot 10 Rooftop, **The Actor's Studio (TAS @ Lot 10)** ups the ante in the Malaysian arts scene. Spanning over 8,000 square feet, the premise features a 250-seat theatre and places the audience far closer to the action than the local arts scene is used to. Using a Japanese design inspired by the Kabuki Tradition, the 'Hanamichi' stage in the new theatre has 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 located 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) for more details.



## A MIDSUMMER NIGHTS FEAST AT STARHILL GALLERY

Starhill Gallery hosted its fourth edition of the **Midsummer Nights Feast** in Feast Village from 1 to 8 July 2011, themed "Master Chefs of the Five Elements", with twelve participating restaurants from Feast Village at Starhill Gallery featuring special items on their menus during the week-long event. This yearly gourmet festival brings the best of Culinary Arts to Kuala Lumpur, with this year's theme paying homage to the five elements of creative powers with different culinary concepts every night, namely earth, water, air, fire and space.



### FEAST VILLAGE JUNIOR

In conjunction with A Midsummer Nights Feast Gourmet Festival at Starhill Gallery, Feast Village hosted culinary and food activities for around 30 underprivileged children from the House of Joy on 2 July 2011, as part of their “Joy to World Community Services” throughout Malaysia. The **Feast Village Junior Programme** is targeted at children aged 4 – 12 years of age with the purpose of educating them about the importance of a healthy and balanced diet. 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 children, wearing Feast Village Junior T-shirts and chef hats, were divided into groups, guided by a “Master Chef” who taught them to make lollipops, berry meringue, *naan* and fish and chips. The House of Joy at Taman Kinrara in Puchong is a non-profit charitable home for children with single parents and from underprivileged backgrounds.



*Children from The House of Joy at Feast Village’s Junior Programme*

### HUTONG – A GOURMET HERITAGE VILLAGE AT LOT 10



*(L-R) Tan Sri (Dr) Francis Yeoh, Mr. Chua Lam, Tan Sri Dato’ Seri Yeoh Tiong Lay, Puan Sri Datin Seri Kai Yong Yeoh, and Dato’ Dr. Ong Hong Peng at the opening of Lot 10 Hutong*



*YTL Corp Managing Director, Tan Sri (Dr) Francis Yeoh with the Secretary General of the Ministry of Tourism, Dato’ Dr. Ong Hong Peng*

In December 2009, Malaysia’s first “Gourmet Heritage Village”, **Lot 10 Hutong**, opened its doors to the public. Set to be a one-stop centre for the very best of Traditional Malaysian Cuisine, the grand opening of Lot 10 Hutong was officiated by Y.Bhg Dato’ Dr. Ong Hong Peng, the Secretary General of Ministry of Tourism and Mr. Chua Lam, the renowned Hong Kong celebrity food critic, together with YTL Managing Director Tan Sri Dato’ Dr. Francis Yeoh, YTL Executive Chairman Dato’ Seri Dr Yeoh Tiong Lay, and Puan Sri Datin Seri Kai Yong Yeoh.

In his officiating speech, Dato' Dr. Ong Hong Peng revealed that tourist expenditure in Malaysia in 2008 was around RM49.5 billion – roughly RM8.7 billion from that figure was spent on food and beverage alone. Lot 10's Hutong is doing a great service to the nation by not only driving tourism but also protecting Malaysia's Food Heritage. It is preserving a cultural and culinary legacy for the appreciation of our future generations which may be forgotten, if neglected.

With its inception, customers are now able to experience the very best of authentic traditional cuisine in a pleasant, comfortable and hygienic environment. Only the "best of the best" in street food vendors, many of whom have been in business for over 50 years, are featured in Lot 10 Hutong. Tan Sri (Dr) Francis Yeoh, brainchild of the Lot 10 Hutong Gourmet Heritage Village, insisted the originality of taste from its ingredients and preparations of the food are maintained at Lot 10 Hutong.

Among the vendors that are featured in Lot 10 Hutong is *Kim Lean Kee Hokkien Mee*, a family business that has been passed down through four generations where charcoal is still used to fry the noodles, and *Campbell Mini Popiah* which used to be in Lorong Tiong Nam since the 1970s has also agreed to be housed in Lot 10 Hutong. Its popiah or Teochew-style spring rolls have satisfied the palates of its customers for almost 40 years now. Other familiar names at Lot 10 Hutong are *Hor Weng Kee Wanton Mee*, *Lammeeya*, *Mr Siew Bao*, *Hon Kee Famous Porridge*, *Luk Yu Dim Sum*, *I Love Yoo! (You Tiao)* and *Mor Sang Kor Bak Kut Teh*.



## YTL CONCERTS OF CELEBRATION

On 8 May 2010, to mark the recent expansion of the Group's operations into the Singapore market, YTL staged its **Concert of Celebration 2010** at the Singapore Botanic Gardens, bringing to the stage world-renowned Italian singer Andrea Bocelli. He was joined by special guests Australian pop singer Delta Goodrem, Slovenian soprano Sabina Cvilak and acclaimed flutist Andrea Griminelli. Bocelli's stellar performance was well-received by the audience, whose enthusiasm moved Bocelli to perform seven encores before receiving a massive standing ovation. In a grand display of celebration, amazing fireworks completed the show as the night sky was illuminated with brilliant sparks of light.

In conjunction with the spectacular concert, Community Chest was chosen as YTL's charity partner. YTL made a donation of S\$850,000 to Community Chest which will go towards supporting critical social service programmes, under the care of Community Chest.

In honour of the Concert of Celebration 2010 and in recognition of YTL's thanksgiving efforts to the local community, the Singapore Botanic Gardens named two new additions to its splendid collection of "VIP orchids" – "*Vanda YTL*" and "*Vanda Andrea Bocelli*". YTL and Andrea Bocelli joined a prestigious list of distinguished state VIPs and personalities, including Nelson Mandela, Margaret Thatcher, and the late Princess Diana, all of whom had orchids named after them in the Singapore Botanic Gardens' prized collection.

The 2010 event was the latest in the Group's tradition of staging free Concerts of Celebration for the public, a tradition which began in the early 1990s. These concerts have been held at many different locations and have featured some of the most prominent international artists, including The Three Tenors – Jose Carreras, Placido Domingo and the late Luciano Pavarotti – in Bath in the UK, in 2003, and Britain's top tenor, Russell Watson, accompanied by the Adelaide Symphony Orchestra, at our Sentul Park development in Kuala Lumpur to celebrate YTL's 50th Anniversary in 2005.





*Supporting  
Education &  
Community  
Development*

“We desperately need good governance, the rule of law and transparent regulatory framework in the global economy to rebuild trust and regain moral integrity. We must promote courageous and responsible leaders to high places. Ethical business and commercially profitability do not have to be mutually exclusive. Being a force for good is not a zero-sum game.”

– **Tan Sri Dato’ (Dr) Francis Yeoh Sock Ping, CBE, FICE,**  
*Managing Director of YTL Corporation Berhad, Primus Inter Pares (First Among Equals) Honouree at the 2010 Oslo Business for Peace Award, October 2010*



**EDUCATION INITIATIVES**

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.

**Malaysia**

***YTL Foundation***

The YTL 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 YTL 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, and accounting.

Visit [www.ytlpowerinternational.com/about\\_us/scholarship.asp](http://www.ytlpowerinternational.com/about_us/scholarship.asp) for more details.

***YTL International College of Hotel Management***

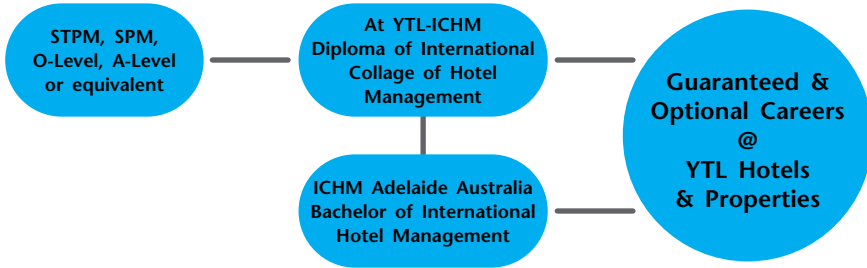


*Students at YTL-ICHM are given industry placements during the course and job opportunities upon graduation at the Group’s hotels and properties.*

The YTL International College of Hotel Management (YTL-ICHM) nurtures talents in the Hospitality Industry by providing a well-balanced education in the area of Hospitality. Learning first hand from industry experts, students are taught within a fully operating hotel, in acampus which essentially functions as a “live classroom”. Industry placements, an integral part of the syllabus, are courtesy of YTL Hotels & Properties.



## COURSE PATHWAY



Well-qualified students are given the opportunity to apply for scholarships to pursue the Diploma of International Hotel Management at YTL-ICHM. Academic performance and interview evaluations form the basis of selection and upon graduation, students awarded scholarships will in turn contribute to YTL Hotels by becoming a valued employee in any of the organisation's properties.

Visit [www.ytl-ichm.edu.my](http://www.ytl-ichm.edu.my) for more details.

### *The University of Nottingham in Malaysia*

In line with our plans for educational expansion, we have fostered a joint partnership with The University of Nottingham in Malaysia. The university is amongst the ten best universities in the UK, alongside institutions such as Oxford, Cambridge, Imperial College London, and the London School of Economics.

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 in China. The University's campuses in the UK, Malaysia and China are award-winners in themselves. With open parkland sites, gorgeous landscaping, and signature architecture, they offer an unrivalled setting for learning.

The University of Nottingham Malaysia Campus has a joint partnership with two local partners. The dedicated campus (which opened early in 2005) sits on a 101-acre site close to Semenyih, 30 kilometres south of Kuala Lumpur, and is the first purpose-built campus of a British university outside of the UK. Facilities include laboratories, library, sports complex, Student Association building, bookshop, cafés, and convenience stores.

### *The Universiti Malaysia Sabah*

YTL's Executive Chairman, Tan Sri Dato' Seri (Dr) Yeoh Tiong Lay, is currently Pro Chancellor of Universiti Malaysia Sabah and attends convocations at this university annually, awarding certificates to its thousand-strong graduates. Universiti Malaysia Sabah was the first local university to be built in the town of Beaufort, Sabah.

The Group supports the UMS Foundation through donations, including a contribution of RM2.5 million towards the foundation in 2004. As the ninth university to be established in Malaysia, it has been progressing at a tremendous pace since its inception on 31 January 1994. 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 the university to set up a branch campus in the Federal Territory of Labuan. Following further acquisitions of building facilities for teaching, learning, and research, there have been an increasing number of schools, centres, and units at the university.

### *Education Partner Programmes with Malaysian Universities-YTL Communications and the YES 4G Network*

In 2010, YTL Communications Sdn Bhd (YTL Comms) launched the **Education Partner Programme (EPP)**, an extensive initiative spearheaded by YTL Comms to bring 4G converged services offering data, voice and mobility to leading public and private universities in Malaysia. All twenty of Malaysia's public universities and selected private universities are expected to join the program by the end of the year.

Designed to cater to the growing needs of a tech-savvy, mobile, knowledge-thirsty and highly-innovative generation, the program aims to provide new levels of interactivity between students and faculty via 4G intranet and ease of access to information through 4G mobile internet. Under the EPP, students will enjoy high-speed, wireless broadband access from anywhere within their campuses. Each student will be provided with converged data and voice services totalling 300 megabytes (MB) per user, per month, for a period of three years. This venture puts Malaysian campuses on the map as among the first worldwide to offer such ease of access to the most advanced internet technology available today.

Under the program, YTL Comms has signed agreements with Universiti Teknologi Malaysia (UTM), Universiti Tunku Abdul Rahman (UTAR), Universiti Putra Malaysia (UPM), Universiti Malaya (UM), SEGi University College (SEGi), Universiti Sains Malaysia (USM), and Kolej Tunku Abdul Rahman (TARC) to jointly deploy 4G networks throughout the universities' campuses.

The partnership with UTAR will empower 19,000 students throughout the university's campuses. YTL Comms will also work closely with UTAR to nurture the development of internet applications in the university's technology degree courses.



*(L-R) Professor Dr. Lee Sze Wei, Vice President (R & D and Commercialisation), UTAR; Ir. Professor Dato Dr. Chuah Hean Teik, President of UTAR; Tun Dr. Ling Liong Sik, Chairman of the UTAR Council; Wing K Lee, Chief Executive Officer of YTL Comms; and Jacob Yeoh, Executive Director of YTL Comms, at the launch of YTL Comms' EPP*



*YTL's 4G Campus-wide Network is set to take UPM's model of Ubiquitous Learning Environment (ULE) even further*



*Universiti Malaysia plans to utilise YTL's 4G Campus-wide Network to boost research activities and be among the top 100 universities in the world*


The EPP is also set to take UPM's Ubiquitous Learning Environment (ULE) further, as it relies on the Malaysian Research and Education Network (MYREN), a high-capacity broadband network that connects universities, colleges, research organisations and scientific laboratories. UPM was one of the founding proposers of this dedicated network that provides a platform for creating research communities and encourages them to exchange ideas and collaborate with international partners.

At Yes, we believe that high speed Internet access should be available to everyone. And as future leaders of our nation, it is only right that our students be given the opportunity to harness the benefits of a 4G Campus-wide network. We believe that supporting students with high-speed wireless access will enable them to take advantage of the Internet as a source of knowledge and information. Hopefully, this exposure will shape and enhance their worldview for the better.



**“The EPP allows our students to do things differently and bring about a wave of positive change in a YTL Comms 4G enabled education environment that will eventually contribute to the larger success of the nation.”**

**Tan Sri (Dr) Francis Yeoh,**  
*Executive Chairman of YTL  
Communications*

<i>The EPP provides:</i>	<i>Campuses currently supported by the EPP:</i>
<ul style="list-style-type: none"> <li>• Free 300MB of data or 100 minutes of calls or 100 SMS (equivalent to RM9) per month</li> <li>• No activation fee</li> <li>• No minimum usage</li> </ul> 	<ul style="list-style-type: none"> <li>• Universiti Teknologi Malaysia</li> <li>• Universiti Tunku Abdul Rahman</li> <li>• Universiti Putra Malaysia</li> <li>• Universiti Malaya</li> <li>• Universiti Sains Malaysia</li> <li>• Kolej Tunku Abdul Rahman</li> </ul>

Ultimately, YTL Comms plans to provide an affordable, world-class, converged 4G mobile internet network nationwide, working with best-in-class partners such as Cisco, Clearwire, GCT Semiconductor, and Samsung. The Group has been a strong supporter of the Malaysian Government's National Broadband Initiative (NBI) to increase household broadband penetration to 50% nationwide by end 2010, which was a success with broadband penetration rate reaching 55.6% in Malaysia by the end of the year. The Group is committed to sustaining the momentum from this achievement, and in doing so, aims to bridge the divide between the urban and rural communities, improve the quality of life, and support efforts to promote technological innovation.

Visit [www.yes.my/v2/epp/students.do](http://www.yes.my/v2/epp/students.do) and [www.ytlcomms.my/EN/index.aspx](http://www.ytlcomms.my/EN/index.aspx) for more details.

## Indonesia

### PT YTL Jawa Timur

YTL and PT Jawa Power (Jawa Power), the Group's 35%-associate company in Indonesia, have contributed significantly to community education improvement locally and continue to strive for maintaining and improving education at the two schools it supports, SMA Tunas Luhur, inaugurated in November 2008, and SMP Bhakti Pertiwi, established in 2003. Jawa Power owns a 1,220 megawatt (MW) power station in East Java in Indonesia, with operations and maintenance carried out by the Group's wholly-owned subsidiary, PT YTL Jawa Timur.

Bhakti Pertiwi and Tunas Luhur are full-day, junior and senior high schools PT YTL Jawa Timur supports. Tunas Luhur has two blocks of two storey buildings comprising 12 rooms in an area of 8,450 square metres and accommodates 150 students under a moving class system. Currently, Tunas Luhur has some 132 students in three grades, each with two parallel classes. In the recent National Examinations, Tunas Luhur emerged as the best school in Probolinggo. Bhakti Pertiwi has commenced its International Class Program, affiliated with Cambridge University, London, in a move that has made Bhakti Pertiwi a national benchmark school.

In support of education in the region, YTL and Jawa Power held the YTL-Jawa Power Mathematics Olympiad 2010, which attracted participants from 650 elementary schools in the Probolinggo regency. The winners were sent to the Java Mathematics Olympiad and ranked 3rd and 4th in the competition. In addition, the schools have also been active in green energy development, deploying biogas, solar stoker, as well as encouraging organic waste composting within the local community.



PT YTL Jawa Timur supports two local schools in Indonesia. Pictured: The SMA Tunas Luhur School

## Singapore

### PowerSeraya



*Singapore Prime Minister Lee Hsien Loong launching Clean and Green Singapore 2010*

- **Clean and Green Singapore 2010**

YTL Power's subsidiary, PowerSeraya, has been a sponsor of the Clean and Green Singapore event, the country's largest environmental event organised annually by the National Environment Agency (NEA), for three consecutive years. The launch of the event on 6 November 2010, which was graced by the Prime Minister of Singapore Lee Hsien Loong, saw the company sponsoring a game booth based on the theme of energy conservation.

PowerSeraya also participated in the Schools' Carnival by sponsoring a booth for its adopted school, Greenridge Secondary School to showcase their environmental initiatives. The Schools' Carnival is one of the significant events organised under the umbrella of Clean and Green Singapore, to raise environmental awareness among school children.

- **Contributions to UPAGE (Union of Power and Gas Employees) – Bursary, Endowment Fund**

In FY2009/2010, PowerSeraya donated a combined sum of S\$77,000 to the UPAGE Endowment Fund and the UPAGE Bursary Awards. The UPAGE Annual Bursary Awards are awarded to the children of UPAGE members, based on their academic performance and financial needs of the family. The UPAGE Endowment Fund was set

up with the support of unionised companies under its care (including PowerSeraya) to provide an additional source of funds that will help union members in the form of subsidies and benefits such as welfare grants and training and development courses.

In early 2009, PowerSeraya also donated S\$7,000 to the NTUC (National Trades Union Congress) U Care Fund to help lower-income workers and their families who were impacted by the recession caused by the global financial crisis. The Labour Movement also put aside a portion of the funds for retrenched workers affected by the recession.

- **Energy Learning Hub**

On 14 August 2009, Greenridge Secondary School launched its Energy Learning Hub, sponsored by PowerSeraya. The Hub serves to highlight the relationship between energy, the environment, and climate change, bringing students through a journey of learning about energy sources, energy production, and the importance of sustainability. It seeks to raise awareness on how decisions made today can influence the future of energy, in hopes that it will inspire students to be responsible energy users and play a role in mitigating the effects of climate change.

With an investment of S\$170,000, the launch of the Hub marks a significant milestone for PowerSeraya in promoting environmental stewardship not only to students within the school, but also to those from 10 other schools in the same school cluster, and to the community at large. As of December 2009, close to 1,100 students, teachers, and parents have visited the Hub since its launch.

- **Nithiah Nandan Book Prize**

In 2010, book prizes worth S\$1,000 each were awarded to two of PowerSeraya employees' children at the Nithiah Nandan Book Prize ceremony. Set up in 2007, this book prize was created in honour of the late Mr Nithiah Nandan, former executive secretary of the Union for Power and Gas Employees (Singapore) for his support of life

long education and dedication to serving others. The book prize recognises the exemplary performance of 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. As of December 2010, nine of its employees' children have received this book prize.



*PowerSeraya CEO John Ng with Prize Winners at the Nithiah Nandan Book Prize Ceremony*

- **PowerSeraya Scholarship**

The PowerSeraya Scholarship was set up in 2008 and each year, between two and six outstanding undergraduates from the Nanyang Technological University are selected to receive a bond-free scholarship worth S\$8,000 per annum. In 2010, the company gave out scholarships to two undergraduates (one pursuing an accountancy degree and the other a degree in chemical and biomolecular engineering). These scholars were also given internship opportunities at PowerSeraya.

Scholars are chosen from students pursuing courses at the College of Engineering, College of Science and the Nanyang Business School from their second year of study. While students are selected primarily on their academic and CCA (Co-curricular Activities) performance, those who have handled environmental projects or contributed significantly to the community are strongly considered for the scholarship programme.



*PowerSeraya CEO John Ng with a recipient of the PowerSeraya Scholarship*

## COMMUNITY SUPPORT & DEVELOPMENT INITIATIVES



The YTL Group recognises its 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.

## Malaysia

In 2011, YTL supported The Girl Guides Association of Malaysia, whom spearheaded an initiative to fundraise for relief efforts in response to the Japanese Earthquake and Tsunami. The Prime Minister's wife Datin Seri Rosmah Mansor is the Association's President and launched the "Malaysian Girl Guides – Maybank Fund" for Japan's tsunami disaster victims with an initial contribution of RM200,000. Proceeds were channelled to the Japanese Red Cross Society through the Japanese Embassy in Malaysia, where Rosmah commended Maybank, YTL Corporation Bhd, Star Publications and Kian Joo Can Factory for their contributions towards the fund. The fund's maiden contributions of RM100,000 each were from YTL Corporation and Maybank respectively.

## YTL Power Services

When the Universiti Teknologi Mara (UiTM) Terengganu needed thousands of copies of the New Straits Times for a research project some years ago, YTL Power Services responded to its call for support. Under the New Straits Times (NST) Newspaper in Education (NIE) Programme, 9,600 copies of the NST were distributed to 10 secondary schools in the Dungun, Kemaman and Marang districts. The schools were SMK Tengku Intan Zaharah, SM Sains Dungun, SM Teknik Dungun, SMK Bukit Sawa, SMK Seberang Marang, SMK Air Putih, SMK Cheneh, SMK Mak Lagam, SMK Seri Paka and SMK Bukit Besi. The aim of the project was to get students interested in reading through reading newspapers, as a start. The project has proven that reading newspapers regularly could improve students' command of the English language. Because of its success, the company is prepared to continue its sponsorship on a larger scale.

## YTL Hotels

### • 'Toys for Tots' Campaign

The annual *Toys for Tots* Christmas charity campaign, supported by YTL and held at JW Marriott Hotel, enables guests and visitors at the Group's hotels to donate toys and gifts to benefit underprivileged children. The *Toys for Tots* programme is part of the hotel's continuing efforts in reaching out to 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.



### • Sustaining Local Communities

Throughout all of the Group's internationally-renowned, award-winning hotels and resorts, sustainable practices are greatly encouraged. These practices include supporting the local community by using locally-grown produce and employing local staff.

- At Spa Village Resort Tembok, Bali, local sustainable resources such as local ingredients and seasonal produce are

used in the resort's cuisine, while indigenous herbs are used in its spa treatments. Local staff from neighbouring villages are also employed for their skill and knowledge in traditional spa techniques. These efforts help in sustaining local communities, while minimising imports and shipping.

- At the Spa Village Pangkor Laut Resort, local fruits are sourced, while ingredients such as lemongrass and cinnamon – used in the various spa treatments provided – are grown in the resort's own herb garden.
- At The Majestic Malacca, local producers supply the hotel's handmade Nyonya 'kuih' – a type of local delicacy. The hotel also holds a cooking class to sustain the uniqueness of the Nyonya / Peranakan Heritage Cuisine.
- At both Pangkor Laut Resort and Tanjung Jara Resort, guests are taken on cultural tours of the local community and introduced to the locals' way of life, hence supporting the locals and local trade.
- Cameron Highlands Resort has begun producing an organic compost to use as fertilizer.

## Indonesia

### PT YTL Jawa Timur

A community development program is actively being carried out by PT YTL Jawa Timur and PT Jawa Power for local communities in East Java, Indonesia, with a strong focus on education improvement, income generation, health, and environmental improvement. The Group believes that it is necessary to equip the community with knowledge through education, as well as the right skills and tools, in order to have a truly lasting impact in building the human capacity necessary to sustain long-term social and economic development in the nation of Indonesia. In addition to performing community development programmes, the company also implements a variety of community care and relations activities. These are aimed to foster the harmonious relationship between the local community and government.

### • Helping the Community Generate Income through Cooperatives

The programme focuses on assisting local cooperatives in developing small businesses, providing vocational skills training for the local community, and providing assistance and guidance to small/micro businesses in licensing and banking matters. The cooperatives have become a successful model for community participation in a self-help scheme to improve welfare, assist establishment of new small business activities and improve entrepreneurship skills. Activities which have been carried out include a workshop on fish farming, which attracted much local community interest and has led to several families running their own cat fish farms.



*Nurturing Skills and Training for Housewives*



*Workshop on Fish Farming attended by local farmers*

### • Health and Environmental Improvement

Health and Environmental Improvement activities are focused on intensifying the role of the Integrated Waste Management unit in Bhinor village, developing a mini biogas unit,



beach reforestation, and participating in the improvement of community health facilities. Under guidance by Jawa Power and Jawa Timur, Bhinor's Integrated Waste Management Unit has commenced its commercial phase, and has been regularly producing compost, which is sold to consumers, used in nurseries, and used for planting organic rice. Jawa Power also contributes to raising environmental awareness among the younger generation through the "Adiwiyata" Programme in SMP Bhakti Pertiwi. The Waste Management Unit has also created an organic fruit and vegetables nursery plantation and it is expected that this will help generate additional income to the local community involved in the programme.



*Organic Fruits and Vegetable Crops in Poly Bags in a Nursery*

- **Community Care and Humanitarian Aid**

PT YTL Jawa Timur's "Community Care and Relations Programme" provides assistance to less fortunate families who live close to the power station and relief for natural disaster victims. Last year, a flood hit the villages of Banyuanget and Lubawang, causing great property loss and damage to over 800 houses and a number of public buildings. Jawa Power stepped in to deliver humanitarian assistance for victims of the flood and help them rebuild their lives. This year, the Company provided humanitarian assistance for the flood victims of the village of Banyuglugur, and also aided locals affected by the eruption of the Mount Merapi and also the Mount Bromo volcanic eruptions.



*A donation/shipment unloading in Bogem Village, Sleman Region, to aid relief efforts*

## Singapore

### PowerSeraya

Social and Community Outreach Initiatives at PowerSeraya include the following:

- **Volunteering for Children of Child@Street 11**

Every year since 2005, PowerSeraya has participated in the social outreach programmes organised under the National Electricity Market of Singapore (NEMS). The last five years saw volunteers from the energy industry under the umbrella of NEMS organise outings for a group of children from Child@Street 11, a non-profit organisation which helps young children from low-income and dysfunctional families. In 2010, 7 staff volunteers from PowerSeraya went on an excursion with the children to Marina Barrage for a kite-flying session while in 2011, another 13 volunteers brought the children to the Rainforest Kidzworld water playground in the Singapore Zoological Gardens.



*Volunteering for children of 'Child@Street 11'*

- **Share Programme**

PowerSeraya subscribes to the SHARE (Social Help and Assistance Raised by Employees) Programme, where employees donate to the Community Chest on a monthly basis through a deduction from their salary. Its support for the SHARE programme saw PowerSeraya being awarded the Bronze SHARE award in 2010. Currently, close to 60% of the company's employees take part in the SHARE programme. The Community Chest is a fund-raising arm of the National Council of Social Service with a purpose to ensure that every person within the society has the opportunity to live a life of dignity to his or her fullest potential.

- **Celebrating Christmas with the Less Fortunate**

Celebrating Christmas is a tradition of PowerSeraya for many years. For the first time in 2010, the company invited the intellectually disabled people from the Metta Day Care Activity Centre to join in the company's Christmas celebrations. Christmas gift tags representing the wishes of the Metta individuals were hung on a Christmas tree so staff could pick one to fulfil. The wishes which ranged from big items such as an industrial-sized cooker to small items like chocolates were all fulfilled by Staff and subsequently presented during a Christmas Eve Party held at the company's premises. Guests from Metta were also treated to carolling performances as well as games organised by company staff.



*Celebrating Christmas with the less fortunate at PowerSeraya*

- **Humanitarian Aid**

PowerSeraya has organised a donation drive in response to the double catastrophes that hit Southeast Asia in late September 2009. The company raised close to S\$10,000 for victims of Typhoon Ketsana, which struck a swathe of countries from the Philippines to Japan, and victims of the Padang Earthquake in Indonesia. The amount collected was channelled to disaster relief efforts through Red Cross Society.

**Bath, United Kingdom**

**Wessex Water**



Wessex Water, as a water and wastewater treatment company, is YTL Power International's subsidiary in the UK. The regional water and sewage treatment business serves an area of the south west of England, covering 10,000 square kilometres including Dorset, Somerset, Bristol, most of Wiltshire and parts of Gloucestershire and Hampshire.

Its role in the local community includes the promotion of water efficiency, school visits to help educate children and support for local environmental projects. In 2010 – 2011, Wessex Water surpassed its target of helping its customers save one litre of water per property per day. A large proportion of these savings were achieved through the distribution of water saving devices for the home through its newly launched **WaterSave** pack offered to customers on request. These free packs include a low flow shower regulator, a "save a flush" device for toilets and a leaflet to help customers audit their own water use. In the past year, the company has distributed over 11,000 packs.

Wessex Water's education advisors conduct school visits, giving lessons full of practical activities on ways for pupils and their families to save water in the home. In 2010-2011, the company's education advisors visited over 13,000 pupils in schools or at their education centres providing resources to help pupils to promote water saving at home. This resource has been welcomed by teachers and means their water conservation messages reach a far wider audience.

The company also engages with customers through their summer shows and town tours around the region and through the water efficiency pages on their website. It gives public talks to inform groups and organisations on the wise use of water and promotes the work of the development charity *Water Aid*. Its website also provides water saving advice and information on water saving products, and has a water use calculator that enables customers to compare their water use around the home with the regional average.

Wessex Water's *Wessex Watermark Awards* supports local groups and individuals by providing funds for environmental and conservation projects around the Wessex region. In the last year, Wessex Water has donated over GBP£11,000 to 30 green projects through the Watermark award scheme which has, over the last 10 years, contributed thousands of pounds towards environmental projects in the region.



*Beneficiaries of the Wessex Watermark scheme*

In addition, the company has supported many charities working in their region. Its support for regional charities extends to small donations via its *Community Involvement Committee* and the *Community PlusFund* which boosts the fundraising efforts of its staff. Through its *Restart* and *Restart Plus* schemes, Wessex Water is also helping

underprivileged people in its communities, with these schemes aiming to help those facing severe financial difficulties and whom have problems paying their water bills.

Its groundbreaking *Biodiversity Action Plan* enables the company to support the region's ecology whilst its free water audits enable customers to conserve water and protect the region's water environment.

In addition, Wessex Water is committed to providing its customers with the best possible service and, according to the industry regulator, the Water Services Regulation Authority (known as Ofwat), the water and wastewater treatment company offers standards that are some of the best in the water industry. It has been recognised as an industry leader in a new independent survey of customer experience, conducted by Ofwat, topping the league table for overall customer satisfaction. The high satisfaction score Wessex Water received was largely due to a combination of its prompt telephone answering service with a named contact, fast responses and problem resolution, and consistent transparency at all times.



Wessex Water has also won both Utility Week's "Customer Care Award" and the Award as "Best Creditor of the Year" at the Citizens Advice Bureau's Social Policy Oscars. Its *Wessex Water Partnership* is a range of additional services available to all customers regardless of whether they are a billpayer or not. These services go above and beyond its core role of supplying high quality water to 1.2 million customers and removing and treating sewage from 2.5 million customers.

During 2010 – 2011, of the 2,000 customers surveyed in its own monthly satisfaction survey, 98% rated Wessex Water's service as either "good" or "very good". The company has also retained its government standard "Customer Service Excellence Award" for its approach to customer services and continues to have the best overall package of customer guarantees in the industry. Wessex Water also continues to improve customer service by making wide use of customer feedback to guide changes to processes and make improvements to customer information. For example, the company has improved its calculation of monthly instalment payments, begun paying customer refunds directly to their bank accounts and improved communication over the life of incidents raised by customers. While Wessex Water strives to provide excellent customer service, sometimes things do go wrong and when it does, the *Wessex Water Promise* offers customers compensation payments among the highest in the water industry.

Furthermore, educating its youngest customers is an important priority and its education service provides valuable resources to the region's primary and secondary schools.



- **Wessex Water Promise**

Wessex Water believes its customers are entitled to the very highest levels of service and are committed to providing standards that are the best in the water industry. It has put this commitment into practice in the shape of the *Wessex Water Promise*. This guaranteed standards scheme sets out the standards they aim to meet and covers all areas of service including billing, water quality, sewer flooding and water meters. All

its guarantees are underpinned with a no quibble promise and compensation payments that are among the highest in the water industry.

Visit [www.wessexwater.co.uk/promises](http://www.wessexwater.co.uk/promises) for more details.

- **Wessex Watermark**

This grant scheme, run by Wessex Water in conjunction with the Conservation Foundation, helps to fund environmental projects. Schools, parish councils or community organisations can apply for grants of up to GBP£1,500 towards an environmental project. Every three months, a special project may receive the *Wessex Watermark Gold Award* worth GBP£2,500. The criteria is that the project must benefit the environment and be located within the Wessex Water region – Somerset, Wiltshire, Dorset and parts of Hampshire and Gloucestershire. All the applications are considered by a panel of experts, chaired by botanist and broadcaster David Bellamy.

Visit [www.wessexwater.co.uk/watermark](http://www.wessexwater.co.uk/watermark) for more details.

- **Community PlusFund**

Wessex Water is keen to recognise the commitment that its staff give to their local community and support them in their fundraising activities. Staff taking part in events in aid of local charities can boost the amount they raise by applying to its *Community PlusFund*. Whether an employee is doing a sponsored run, parachute jump or cycle ride, the *Community PlusFund* will match every GBP£1 raised up to a maximum of GBP£250. Only applications from Wessex Water Employees raising money for local charities are considered.

- **Charitable Support**

Wessex Water makes small grants to charities based in or intending to use the donation within its region. It donates thousands of pounds every year through its community involvement committee which meets monthly to consider applications. Through fundraising and donations, its staff and customers raise

around GBP£750,000 each year for WaterAid, the international water and sanitation charity. The Business4Life initiative gives graduates from local businesses an opportunity to develop new skills and raise at least GBP£20,000 for WaterAid at the same time.



- **Education Services**

Wessex Water's Education Service helps school teachers seeking ideas for projects, as well as students wanting to discover more about water. Every year, thousands of children and students aged from three to 15 learn more about water and sewage treatment, water conservation, geology and environmental sustainability through its service. It is able to tailor a range of practical based lessons and activities to suit schools. Its two Education Advisers make school visits or arrange for classes to take part in field study trips at one of its eight education centres: Ashford, near Bridgwater; Blashford Lakes, near Ringwood; Claverton Down, Bath; Holdenhurst, near Bournemouth; Sutton Bingham, near Yeovil; Sutton Poyntz, near Weymouth; Trowbridge and Weston-super-Mare.

Visit [www.wessexwater.co.uk/education](http://www.wessexwater.co.uk/education) for more details.

- **Water Audits**

Water is a precious resource because all life depends on it. Yet millions of litres of water are wasted through careless use. Wessex Water's free water efficiency pack helps people discover how much water they actually use in their home and garden and ways one can conserve water. The pack contains a water saving toilet cistern device

which when fitted can save one litre of water every time the toilet is flushed. The company also offers a free water audit in customers' homes to help them work out ways to become wise water users.

Visit [www.wessexwater.co.uk/waterefficiency](http://www.wessexwater.co.uk/waterefficiency) for more details.



*Wessex Water staff conducting a water audit*

- **Leak Repairs**

By reducing leaks and replacing old mains, Wessex Water has been able to protect the water resources in the region whilst providing water to customers without restriction for more than 30 years. The company helps customers reduce leaks on their water supply service pipe by detecting and repairing or replacing, free of charge, a leaking service pipe to an individual domestic property up to the outside wall of the house – providing it is accessible and does not pass under any structure.

Visit [www.wessexwater.co.uk/cop](http://www.wessexwater.co.uk/cop) for more details.

- **Restart, Restart Plus and Assist**

Wessex Water aims to make it as easy as possible for customers with financial difficulties to pay their water bill and any outstanding debts. Assist is a tariff for customers in extreme financial difficulty that allows customers to pay a lower bill based on their financial circumstances and ability to pay, provided a Citizens Advice Bureau or other debt advice agency applies for the tariff on the customers' behalf, while Restart and Restart Plus are schemes designed to help

people with severe financial difficulties get back on track using a payment plan that they can afford. Through Restart Plus, Wessex Water not only helps those in financial difficulty but also funds debt counseling by Citizens Advice Bureau and debt advice agencies in the areas where their customers are located.

- **Biodiversity Action Plan**

Wessex Water's Biodiversity Action Plan is the first corporate initiative of its kind to be based on the UK Biodiversity Action Plan. It uses the long tradition of wildlife conservation work within Wessex Water and has developed into a comprehensive package of activity, including:

- providing funding to projects carried out by wildlife organisations under the Partners Programme;
- action to minimise the impact of building new infrastructure, such as treatment works and pipelines; and
- work to enhance biodiversity on Wessex Water land, such as the sites of treatment works.

Visit [www.wessexwater.co.uk/bap](http://www.wessexwater.co.uk/bap) for more details.



*The stunning landscape and biodiversity found on Wessex Water land*

## EMPLOYEE WELFARE

As a Group, YTL understands the immense contribution of our people towards our growth and success, and we organise workshops, gatherings, and teambuilding events to enhance and foster unity within our people. We also provide our employees with a 13-month wage supplement to supplement higher costs of living and Employees' Share Options Schemes.



- **YTL Leadership Conferences**

We aim to inspire employee and leadership skills through the YTL Leadership Conference, an annual 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. Our Chairman, Tan Sri Dato' Seri (Dr) Yeoh Tiong Lay, and our Managing Director, Tan Sri (Dr) Francis Yeoh Sock Ping, together with members of the Board of Directors, normally chair and moderate these sessions, contributing to the dialogue on leadership. The conferences create a forum for the exchange of ideas, inspiration, interaction, collaboration, and communication.

- **Group Hospitalisation and Insurance Plan**

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.



- **Cultivating an Occupational Safety & Health (OSH) Culture**

The nature of operations at the Group's power stations, cement plants and other operations poses various safety and health risks to persons working within the compounds. YTL Power Services Sdn Bhd (YTLPS), a wholly-owned subsidiary of the Group and the operation and maintenance company for the Malaysian power stations, is just one example of how YTL is putting OSH practices into action. YTLPS has been committed towards OSH since its inception in 1993, drawing up an OSH policy and incorporating OSH practices in all operational procedures from the start. These measures were taken even before the OSH Act (OSHA) was gazetted in Malaysia in 1994.

Over the years, management has continually and regularly reviewed OSH practices and procedures for continuous improvement. OSH-related inductions and trainings are organised for employees at all functional levels, and third parties such as contractors and visitors are kept informed and supervised, if necessary.

This year, all employees attended a mandatory OHSAS 18001:2007 training that covered important issues and misconceptions associated with OSHA compliance, such as the misconception that office-based staff are exempt from OSHA requirements. The training drove home the fact that everyone, including non-technical personnel, has a role to play. Besides training, internal audits were organised to prepare the staff for the first stage audit which was conducted in July 2010 by Moody International.

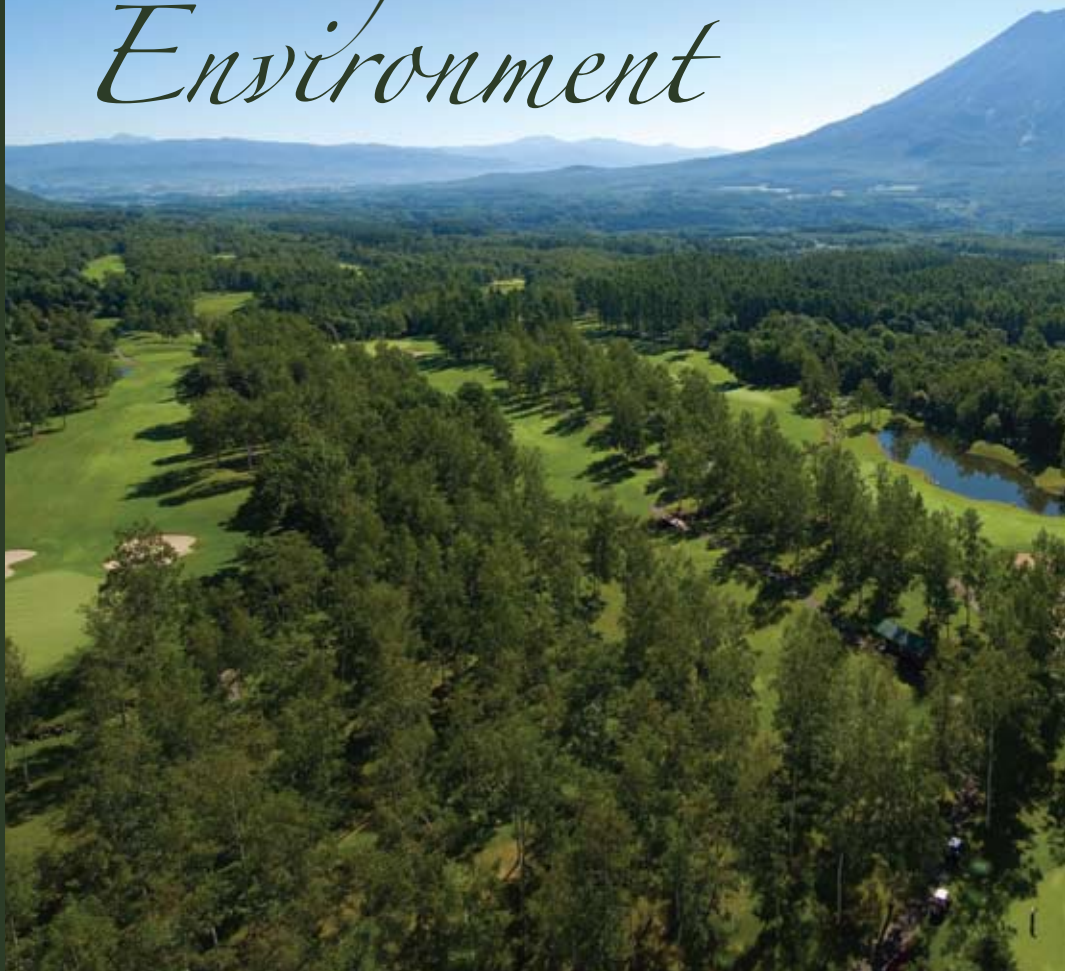
Achieving a strong OSH culture calls for a concerted effort in the roadmap towards obtaining certification of the OHSAS 18001:2007, as well as the Integrated Management System, which brings together the Quality Management System (QMS), Environmental System (EMS), and Occupational Health and Safety Advisory Services (OHSAS) into one cohesive system, which YTLPS is currently working to obtain.

- **Workplace Health**

At YTL's subsidiary, PowerSeraya in Singapore, a Workplace Health Sub-Committee focuses on arranging fitness and health-related activities ranging from bowling to dragon-boating to health-related talks during lunchtimes. A small gym is also available in the premises of their corporate office as well as in their power station for the convenience of their staff.



*Protection of the  
Environment*







“In tomorrow’s resource-constrained world that seriously addresses the problems of waste, ‘business-as-usual’ is a dangerous strategy. Corporate and global leaders urgently need to embrace the planet-saving message of our future resource-constrained world. A major industrial revolution is inevitable – a roadmap is needed to cross the chasm to a new economy that relies less on resources and a license to operate that is not based on a mantra of ‘take-use-discard’.”

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

### THE YTL GROUP'S ENVIRONMENTAL VISION

We are fully committed to being a responsible corporate citizen. Energy plays an essential role in ensuring a high 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.

The Group's key investment activities include:

- 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-SVC, and advising on CDM and certified emissions reductions (CER) projects both internally and externally;
- A dedicated YTL Group Sustainability Committee committed to furthering sustainability within all the business units in the Group;
- 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 non-governmental organisations (NGOs), non-profit organisations, and privately funded organisations for environmental advocacy, awareness, and mitigation and preventative activities; and
- 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.

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.

Carbon Accounting for the Group commenced in 2007, measuring carbon emissions. The carbon footprinting will be used to monitor, manage and report, especially on higher emitting activities of the Group, and manage future emissions.





### YTL Group Sustainability Committee

The objective of the YTL Group Sustainability Committee (YTL GSC) is for Directors, Employees and Agents of the Group to conduct themselves in a manner that always meets and regularly exceeds expectations of sustainable practices through the mastering of three languages – the language of God, Man and Machine. The understanding amongst our Committee Members is that ultimately, we should be good Stewards of this Earth we have inherited from God.

The Mission of the YTL GSC is to:

- provide services and products that meet customers' expectations whilst minimising the impact on the environment;
- further conservation efforts in Malaysia, Asia and beyond;
- reduce materials consumption and use recycled material for products and packaging where practical;
- recycle all waste materials; and
- reach a target of zero waste to landfills and incinerators.

The GSC meets every six months and comprises the Committee members or their proxies. A GSC Sustainability Policy has been formulated in order to streamline and unify the Group's Sustainability Policy across all business units.

Furthermore, the purpose of the YTL GSC is to assist the Board in the supervision of:

- Health, safety, environment and community risks;
- The Group's compliance with applicable legal and regulatory requirements associated with health, safety, environment and community matters;
- The Group's performance in relation to health, safety, environment and community matters;
- Performance and leadership of the health, safety, environment, community and sustainable development function;
- The Group's Annual Sustainability Report; and
- Preparation of a report by the Committee to be included in the annual report.

## UTILITIES

The Group's utilities encompass power generation, transmission and multi-utility services in Malaysia, Singapore and Australia, and the provision of water and sewerage services in the UK.



### Power Generation, Transmission & Multi-Utility Services

#### YTL Power International

YTL Power International Berhad is an international multi-utility group active across key segments of the utility industry. Headquartered in Malaysia and listed on Bursa Malaysia, the company operates in Malaysia, the United Kingdom, Singapore, Australia and Indonesia. Its key businesses include:

- power generation and retail;
- electricity transmission;
- water supply and wastewater services; and
- communications.

The company believes that it has a responsibility to ensure the sustainability of its businesses for future generations to continue enjoying the earth and its resources within limits. It has often exceeded environmental legislative requirements and also strives to improve the lives of the communities in which its businesses operate through educational and social programmes.

Visit [www.ytlpowerinternational.com/sustainability/sustainability.asp?catName=sustainability](http://www.ytlpowerinternational.com/sustainability/sustainability.asp?catName=sustainability) for more details.

#### YTL Power Services

YTL Power Services Sdn Bhd (YTLPS) is a multi-disciplinary services company registered in Malaysia in October 1993, specialising in the operation and maintenance of power stations. The company manages the entire range of operation and maintenance (O&M) activities for YTL Power's two Malaysian power stations in Paka and Pasir Gudang, which together generate about 12% of the electricity consumed in Peninsular Malaysia, including the sustainability measures that are put into place at the power stations and as follows:

- **Paka and Pasir Gudang Power Stations, Malaysia**

The Group owns and operates two gas fired combined cycle power plants with a combined capacity of 1,212 megawatts (MW) located in Paka, Terengganu, and Pasir Gudang, Johor. Our power stations are designed to comply with Malaysian environmental quality regulations with regard to emissions. Natural gas is the only fuel used in the YTL combined-cycle power plants and this is regarded as the most environmentally friendly fuel compared to other fossil fuels. The emission of greenhouse gases is minimum and much lower than local and international standards. However, modifications made to the Paka and Pasir Gudang gas turbines have reduced the amount of NO<sub>x</sub><sup>2</sup> in the GT exhaust gases by around 50%.

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. Modifications made to two of the Paka Power Station's gas turbines (Paka GT11 and GT12) have reduced the amount of NO<sub>x</sub> in the gas turbines' exhaust gases by around 50%. The same modifications are also planned for the stations' other gas turbines. The NO<sub>x</sub> emission levels achieved are well within World Bank standards.

2 NO<sub>x</sub> is a generic term for the mono-nitrogen oxides NO and NO<sub>2</sub> (nitric oxide and nitrogen dioxide)

ISO 14001 Environmental Management Systems (EMS) certification has been obtained for both power stations and mechanisms are also being implemented for the management of power plant gaseous emissions, waste effluent, discharge cooling water, and industrial scheduled waste. Plant emissions of greenhouse gases are minimal and much lower than local and international standards.

In addition, all four Paka gas turbines have undergone the removal of the secondary air flap, further reducing substantial NOx emissions. Pasir Gudang's secondary air flap was removed in July 2009 during Pasir Gudang's first major turbine overhaul after 15 years of baseload operation, leading to a 40% reduction of NOx emissions.

Current developments include:

1. Gas Turbine Burner Upgrades

All six gas turbines in Paka and Pasir Gudang are being scheduled for burner upgrades to the latest technology – Siemens HR3 design – which is more fuel efficient. The upgrades are being carried out in stages to ensure the highest availability for power generation. During the 100,000 Equivalent Operating Hours (EOH) overhauls, the flame tubes were modified to prepare for the installation of the HR3 burners during the 133,000 overhauls. So far, two gas turbines in Paka have completed the upgrades.

2. High Voltage Transformer Bushing

Starting with Pasir Gudang station, the high voltage (275kV) transformer bushings have been replaced with bushings of more sustainable material. The old type is made of porcelain and is oil-filled. The new-type is made of silicon and is maintenance free, meaning periodical washing is not required (saves water) and there are no risks of oil leakages and explosions.



*High Voltage Transformer Bushings replacements being carried out*

3. SFC / SEE Retrofit

The Start-up Frequency Converter (SFC) and Static Excitation Equipment (SEE) control panels for only one generator (out of nine generators in Paka and Pasir Gudang) were replaced with the latest versions, in response to system obsolescence and discontinuity of manufacturer's technical support. The spares from the dismantled panels were stored and may be used for the rest of the eight generators.

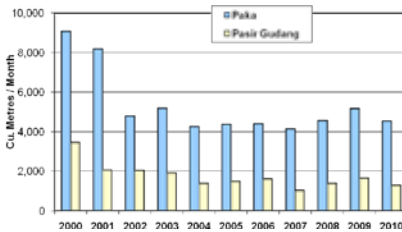
This concept of spare part pooling reduces electronic waste and is the third time such a practice has been done. The first was for the power plant Distributed Control System which was upgraded in 2006 whereby Pasir Gudang (the smaller plant) was upgraded to keep spares for Paka (the larger plant). The second time was for the electrical protection of one generator (out of nine), which was done in Pasir Gudang, and spares were kept for the other eight.

**Water Reduction**

Over the past few years, YTLPS' efforts in reducing water consumption at both power plants have 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 leaking 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. Staff and Employees at the Power Plants continue to be reminded to support the Stations' efforts to reduce water wastage. This initiative not only helps the environment but also saves money at the same time.

**Monthly Demineralised Water Consumption**



The Chart shows that monthly demineralised water consumption for both plants have decreased over the years, and have also decreased significantly from 2009 to 2010, which is overall a good sign.

**Quality Management Excellence Award (QMEA) 2010**



*YTL Power Services receives the QMEA 2010*

YTL Power Services achieved the QMEA 2010 and was presented the Award in March 2011 for the evaluation period of 2008 – 2010. YTLPS won for excellence because of top management commitment and successful implementation towards its continuous improvement journey, evidenced by the achievement of the Integrated Management System (compliant to PAS 99 standard) which comprises ISO 9001:2008 (Quality Management System), OHSAS 18001:2007 (Occupational Safety and Health Management System) and ISO 14001:2004 (Environmental Management System).

The ISO 14001: 2004 certification means that YTL Power Services continuously adopts the highest standards of sustainable practices, including technological improvements for higher efficiency in power generation, green practices such as proper waste management and 3R (Reduce, Reuse and Recycling) efforts, as well as instilling employee, vendor and contractor awareness in sustainable practices. The company has developed an impressive *Environmental Aspect and Impact Assessment database* which is electronically available to all power plants, including the head office, to ensure stringent control of sustainable practices.

#### **V94.2 Gas Turbine User Conference/GT Life Extension Programme**

YTL hosted the annual **V94.2 Gas Turbine World Conference** for the second time in December 2010. The event attracted Original Equipment Manufacturers, Siemens and Ansaldo as well as V94.2 gas turbine users. The round table discussions included topics such as technology upgrades for improved efficiency, lower NOx emissions and refurbishment of hot gas path components. YTL Power Services presented on an important topic which is practised in Paka and Pasir Gudang, for example, the gas turbine life extension programme, which only requires samples to be taken to determine material deterioration. Such sampling may indicate that turbine parts can be further used for another running interval before replacement is required. The V94.2 gas turbine is the model installed in Paka and Pasir Gudang. There are six of these turbines installed.

#### **Paka Beach "Gotong-Royong"<sup>3</sup>**

YTL Paka power station continues its yearly post-monsoon season effort to clean-up the Paka beach together with TNB (a neighbouring station). Post monsoon, the beach is strewn with rubbish brought in by the stormy waves. The effort continues to prove effective in instilling awareness and appreciation for conservation of the natural environment.

#### **YTL Power Services (Lebanon) SARL**

In February 2011, YTL Power Services took over the Operation & Maintenance of 480 MW Deir Amar and 480 MW Zahrani combined cycle power stations in Lebanon. The five-year contract was awarded to YTLPS (Lebanon) SARL by Electricite du Liban (EDL) requiring a lifetime extension plus upgrading of the gas turbines, whole plant refurbishment plus the Distributed Control System upgrade. The power generation makes up half of Lebanon's total power generation capacity. A team from YTLPS Malaysia are currently located in Deir Amar, Zahrani and the Beirut Head Office to set up the initial operations.

The quality, health, safety and environment policy and procedures from the Malaysian operations have been adopted in Lebanon due to the successful implementation in Paka and Pasir Gudang.



*The Zahrani Plant in Lebanon*

#### **Jawa Power and Jawa Timur, Indonesia (PT YTL JT)**

Jawa Power owns a 1,220 MW coal-fired power plant located at the Paiton Power Generation Complex in East Java, Indonesia. The plant is operated by Jawa Timur, a wholly-owned subsidiary of the Group. Jawa Power and Jawa Timur recognise the impact their activities may have on the environment and continue to remain committed to continually reducing the plant's carbon footprint.

Reflecting this commitment, the Jawa Power station (Paiton II) has been certified to the ISO 14001:2004 EMS standard, and has won a PROPER Award, maintaining a "**Green Rating**" for its Environmental Managements Systems under the Indonesian Ministry of Environment's **Environmental Rating Programme** for the fifth consecutive year. The Green Rating indicates that the company has implemented effective pollution control programs, has successfully exceeded the requirements of environmental laws and regulations, and is only one step below the highest rating, the "**Gold Rating**", which Jawa Power is aiming to achieve going forwards.

<sup>3</sup> "Gotong-Royong" is a conception of sociality familiar to large parts of Indonesia and Malaysia. The phrase has been translated into English in many ways, most of which harken to the conception of reciprocity or mutual aid (as defined by Wikipedia Online).

The award is the highest recognition for sustainable practices in Indonesia and also reflects, in addition to 100% compliance with the laws and legislations, good efforts in community development or Corporate Social Responsibility (CSR), all of which are in line with Jawa Power's Environmental Policy Statement "to develop and maintain a high standard of environmental care, to prevent pollution and to improve continually its environmental performance." The site also remains the only coal-fired power station thus far to have received the *Green Rating* and continues to be the benchmark for other coal fired power stations in Indonesia.

At the beginning of 2011, PT YTL JT successfully integrated Quality, Health, Safety, and Environmental Management Systems. ISO 9001:2008, OHSAS 18001:2007, and ISO 14001:2004 implementation have also been audited and certified by Moody International's Certification Body.

#### ***Environmental Programme***

PT YTL JT's Environmental Programme reflects the company's aims towards sustainable development and is stated in the Environmental Policy Statement. The programme covers a commitment for compliance to all relevant environmental regulations and if reasonably practicable, the company can achieve beyond legal requirements and increase its commitment to promote energy and water conservation, effective waste management systems, planting programmes, green energy development in the community around the plant, and environmental education among its staff and community.

#### ***Energy and Water Conservation***

Keeping with corporate aims to uphold environmental preservation, Jawa Power has implemented several programs in its operations to reduce its overall carbon footprint, using the 'reduce, reuse, and recycle' (3R) approach. These responsible practices have also led to increased plant performance and efficiency, even though the power station is aging. The plant's high efficiency figures are maintained by implementing good operation and maintenance practices, periodic performance tests, efficiency monitoring, routine environmental surveys by independent surveyors (sea water monitoring, water discharge, air pollution, and social environmental impact), and thorough work improvement teams to explore any initiative for further efficiency improvements.

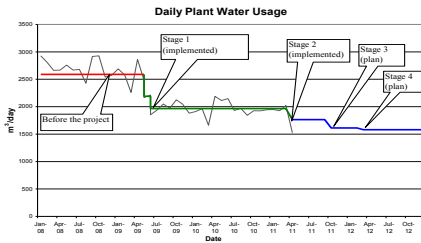
- ***Water Conservation***

The station has developed an implementation plan following a brainstorming exercise for recycling all used plant water, which could reduce up to 1,050 cubic metres per day (equivalent to a 40% reduction) of plant water usage, and decrease waste water discharge from 730 to 450 cubic metres per day. Service water is vastly used in the plant for coal dust suppression systems, plant cleaning, ash lagoon maintenance, and equipment cooling systems, among others. The reductions of water usage will result in chemical and electrical power savings equivalent to around US\$75,000 per year, reducing the plant's overall impact on the environment.

Beside the service water, the plant has already optimised its demineralised water consumption by close monitoring of losses, optimisation of de-aerator vent opening, and continuous blow-down operations. The team continues to identify, evaluate, and possibly further improve on opportunities for plant water conservation, as its Water Conservation Programme continues with promising results.



The programme implementation is progressing in stages and is expected to be completed by the beginning of 2012. By now and on average, around 800 metres cubed (m3) per day of water consumption reduction has already been achieved. This is equivalent to a 30% reduction. The expected total reduction is up to 1,050 m3 per day. In addition, the waste water discharge to the environment will also be decreased from 730 to 450 m3 per day. The chemicals and electrical power savings resulting from this water conservation programme has reduced the overall impact to the environment. Further studies are ongoing to pursue zero effluent discharge which will help reduce carbon emissions further.

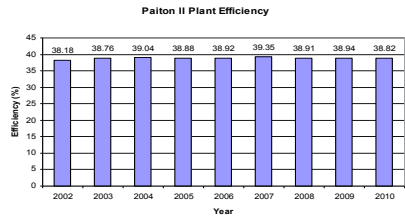


*Graph showing Daily Water Usage at the Plant decreasing under the Water Conservation Programme*

- Stage 1: Recycle MCWP jacket oil cooler to service water tank & Reuse WWTP effluent for Ash Disposal area
- Stage 2: Reuse WWTP effluent for SSCC make up water & Reduce losses from sealing water condenser
- Stage 3: Recycle water discharge from boiler sampling panels
- Stage 4: Reuse effluent from sewage treatment plant for site gardening

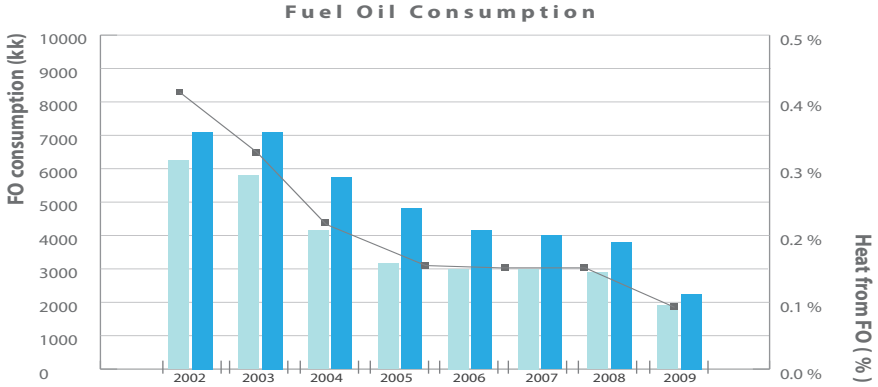
- **Energy Conservation**

The main objective of PT YTL JT's Energy Conservation Programme is to minimise energy losses on turbine, boiler, and sundry systems because of the deviation on the actual operating parameters against the target (design value). A monitoring of actual operating parameters is conducted, and calculation made to give the predicted deviation losses. A prompt action can be planned in case of any significant deviation. As result, the overall plant efficiency can be maintained well although the plant is getting older (12 years in operation).



*Chart showing Paiton II Plant Efficiency*

The site has also consistently minimised the consumption of fuel oil (used during start-up / shut down of the plant and for back-up firing in the event of coal supply disturbance to the boiler) through lowering fuel oil consumption during start up and shut down, and maintaining less boiler firing support. Fuel oil consumption has been brought to lowest levels in 2009 and 2010.



*Graph showing Fuel Oil Consumption decreasing at the Plant*

The Flue Gas Desulphurisation Plant (FGD)<sup>4</sup> operation is also being optimised. Planning between respective sections to formulate proper blending of coals and number of sea water absorber pumps in service resulted in significant reductions of electrical power consumption whilst still maintaining SO<sub>2</sub> emissions well below the regulated limit. After implementation, the total power consumption for the FGD plant decreased approximately 800 to 1,000 megawatt-hours (MWh) per month.

FGD electrical power consumption (average MWh/month)	2007	2008	2009	2010
Unit 50	2,109	1,582	1,456	1,193
Unit 60	1,737	1,446	1,373	1,302
<b>Total Station</b>	<b>3,846</b>	<b>3,028</b>	<b>2,829</b>	<b>2,495</b>

*Table showing FGD electrical power consumption at the Plant decreasing yearly*

### Emissions and Waste Management

- **Monitoring atmospheric emissions**

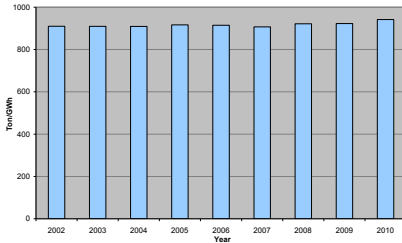
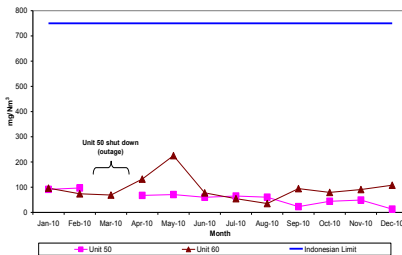
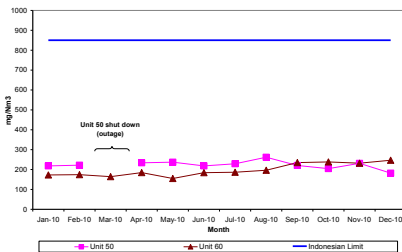
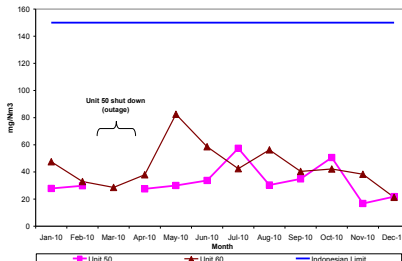
Atmospheric emissions from Jawa Power's plant come from two 220-metre chimneys, and comprise mainly of carbon dioxide (CO<sub>2</sub>), sulphur dioxide (SO<sub>2</sub>), nitrogen

oxide (NO<sub>x</sub>), and fine particles. The plant has consistently maintained high figures of Generation Efficiency which equal less carbon emissions per MWh of electricity generated. It is also equipped with a low NO<sub>x</sub> burner system, an Electrostatic Precipitator, and a Flue Gas Desulphurisation Plant to ensure that the stack emission quality is meeting the expected atmospheric emission quality. A continuous Emission Monitoring System (CEMS) at the plant monitors real time stack emission quality.

All emission parameters are well-managed, and well below the stipulated government regulation limits for emissions. In line with corporate aims to "cut carbon emissions further", the team at the plant consistently puts in a great amount of effort to maintain high figures of Generation Efficiency which will result in less carbon emission per MWh of electricity generated. During the reporting period, compliance to environmental regulation for stack emissions quality was at 100%.

The following chart shows that CO<sub>2</sub> has climbed slightly in the year 2010 (comparing this to 2009 levels) but the Team at the Plant are seriously looking into reducing the emissions levels for the following year based on the mentioned and better efficiency measures going forwards.

<sup>4</sup> Flue Gas Desulphurisation (FGD) is a technology used to remove sulphur dioxide (SO<sub>2</sub>), a gas which causes acid rain and the emission of which is stringently regulated, from the exhaust flue gases of fossil fuel power plants.

CO<sub>2</sub> Emission (ton/GWh)Chart showing CO<sub>2</sub> Emissions at the PlantGraph showing SO<sub>2</sub> Emissions at the PlantGraph showing NO<sub>x</sub> Emissions at the Plant

Graph showing Particulate Emissions at the Plant

### Waste Management

The station has a daily fuel consumption of approximately 13,000 tonnes of coal, which in turn generates about 400 tonnes of ash per day (The coal has an ash content ranging from 2% to 5%), the bulk of which 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. The Paiton ash-lagoon was built with impermeable asphalt layers to prevent contamination of ground water. Though this may have solved immediate disposal needs, it was observed that it could still be susceptible to long-term environmental problems.

Hence, in 2002, Jawa Power embarked on efforts to find a more environmentally-friendly use for its fly ash. After running several tests, it found that 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 and actually improves the strength of the final product.

Starting in 2003, fly ash began to be delivered to a nearby cement processing plant for testing. After successful trials, the cement plant invested in additional feeding facilities and began to take increasing amounts of fly ash from Paiton II. Since 2003, the amount of Pulverised Fly Ash (PFA) reused in concrete production is over 250,000 tons. Beginning with only 26% utilisation of total fly ash generated in 2003, the utilisation rate increased to 98% by 2008. Paiton II expects that in future, all the fly ash generated by the power station will be used. Beside Gresik Cement and Jayaboard, other local ready-mixed concrete companies are also demanding and using the PFA.

Furthermore, the use of fly ash in producing concrete reduces emissions of one of the most dominant greenhouse gases which cause climate change, carbon dioxide (CO<sub>2</sub>), by reducing the use of cement, the manufacturing of which emits large quantities of CO<sub>2</sub>. It has been calculated that for every tonne of cement that is replaced by fly ash, approximately 1 tonne of carbon dioxide is not emitted. Since 2003, the Paiton II plant has helped cement manufacturers to reduce their carbon emissions by more than 250,000 tonnes. Experts estimate that cement production contributes to around 7% of carbon dioxide emissions from human sources. If all the fly ash generated in the world each year were used in producing concrete, the reduction of carbon dioxide released because of decreased cement production would be equivalent to eliminating 25% of the world's motor vehicles.



*Before: Ash Disposal Area (original condition)*

- *Ash Disposal Area goes Green*

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

Efforts have also been made to recycle other hazardous waste (called 'specific waste'), such as wastewater treatment plant sludge, used oil, and used batteries, resulting in 89% of specific waste being recycled in 2009. Other specific waste that cannot be recycled, such as chemical laboratory waste, contaminated waste, fluorescent lighting and machine-made mineral fibres (MMMMF) are handled by a licensed waste disposal contractor. The entire process is managed in a proper manner to ensure that storage time, transportation and the waste disposal process are in compliance with prevailing environmental regulations. Notably in 2010, around 78% of specific waste was reused or recycled.



*After: Ash Disposal Area transformed into a green space!*

The following Charts describe the quantity of waste generated and the quantity that could be reused. *Specific waste* is recycled while *non-specific waste* is managed as part of the waste management programme. It can be observed that figures are falling for overall specific waste produced, a good sign with recycled waste playing a role in the waste management process as well:

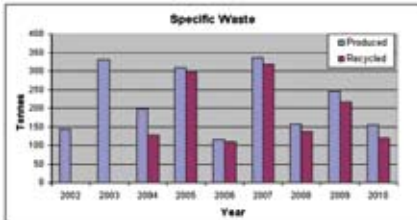


Chart showing *Specific Waste produced and recycled*

Though general waste (“non-specific waste”) has increased, plans are under way to reduce these figures in future.

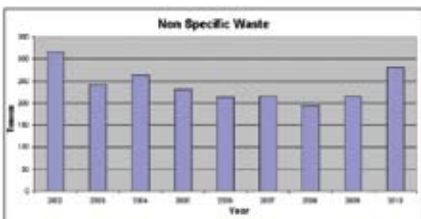


Chart showing *Non-Specific Waste*

- **Composting of Organic Waste**

At the 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 of waste disposal so that the Final Disposal Area is to be converted to become a 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 waste from OHC, which could be recycled such as plastics, papers, metals and rubbers were segregated, collected, and delivered to potential recycling companies. Organic waste was also separated from non-organic wastes and turned into compost to be used as soil conditioners (fertiliser). It is expected the compost can reduce the use of chemical fertilisers.



*Organic Compost produced from organic waste*



*Organic waste being turned into compost*

With respect to global warming mitigation measures, composting of organic waste avoids methane release that occurs if the waste is disposed to open landfill areas. Methane is a greenhouse gas which has a global warming impact 21 times that of carbon dioxide.<sup>5</sup>

### Virtualisation

Paiton II has proposed the implementation of virtual workstations to reduce power consumption and computing resources in the move towards greener office solutions. When fully implemented, only computer monitors will be required at individual workstations as computing will be run from virtual machines located in the office servers.

- **PowerSeraya, Singapore**

PowerSeraya is one of the largest power generation companies in Singapore, with a total licensed capacity of 3,100 MW, and a market share of about 25% of Singapore's electricity market. Centred on generation and retailing of electricity, PowerSeraya's core business is situated on Jurong Island, Singapore's oil, gas and petrochemicals hub. The company is also fast becoming a diversified energy company, supplying utility services such as electricity, steam, and cooling water, engaging in oil trading, and producing water through reverse osmosis desalination for internal use and sale to a large industrial and commercial customer base. Following its recent accolades for its CSR efforts, PowerSeraya continues to strive for enhanced sustainability within the company as well as the community.

On 6 April 2010, PowerSeraya was awarded the "**Most Socially Responsible Company of the Year**" Award at the Asia Power and Electricity Awards 2010 and in 2009, it was also recognised for its sustainability efforts through double wins at The ACCA Singapore Sustainability Report Awards 2009 for "**Best Sustainability Report**" and "**Best First-Time Report**". In the first year of developing its Sustainability Report, PowerSeraya also became the first local company in Singapore

to achieve the highest standard in sustainability reporting with a B+ rating from Global Reporting Initiative (GRI). The company was also among 10 companies to be featured in the inaugural corporate social responsibility (CSR) publication by Singapore Compact, Singapore's national society that champions CSR efforts in the country.



*Second Consecutive Win for PowerSeraya's Sustainability Report*

PowerSeraya also recently clinched the "**Best Sustainability Report**" Award organised by the ACCA Singapore Awards for Sustainability Reporting in October 2010. This makes it the second consecutive year that the company has attained this award. The company's sustainability report had added greater depth and breadth with the doubling of performance indicators from the previous year (i.e. – 23 to 57). Its reporting content also drew greater reference to the company's strategy and local policies, with the report again based on the Global Reporting Initiative (GRI) framework, a global standard for sustainability reporting. Power Seraya was also conferred the "**Merit**" Award for the Singapore Environmental Achievements Awards (SEAA) on 11 August 2011.

Improving energy efficiency and reducing its carbon footprint is not new to PowerSeraya. Over the past decade, the organisation has managed to reduce its carbon emissions by 30%. The following highlight the company's latest sustainability initiatives and achievements to date:

<sup>5</sup> Source: U.S. Environmental Protection Agency

### Eco Office Label



*Kevin Lee, Sustainability Manager at PowerSeraya, at the Eco Office Label Presentation Ceremony*

PowerSeraya was presented the *Eco Office Label* at a presentation ceremony held on 16 February 2011. The Eco Office Label, awarded by the Singapore Environment Council, is given to companies that demonstrate good environmental practices in the office setting. This makes PowerSeraya the country's first power company to have achieved this award, amongst 73 companies in Singapore that have received this award to date since its inception in 2005. The Eco Office Label Certification is valid for two years (2010 – 2012), after which a re-certification is required.

### Virtualisation

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. As a result of virtualisation, the business has been able to dramatically reduce wasted server hardware central processing unit cycles and memory, thus 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 per cent. This translates to savings of about 26,000 kilowatt-hours (kWh) and 12.5 tonnes of carbon emissions per year.

Other important achievements include:

- Achievements of an equivalent server consolidation ratio of greater than 10 to 1;
- Increased CPU utilisation from 3% on average to 20% to 50% over a 24x7 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; and
- Reduced data centre floor space and cooling requirements as fewer physical servers are required to operate the PowerSeraya environment.

### *Environmental Sustainability at Plant Operations*

#### *High Thermal Efficiency Cogeneration Power Plant Officially Launched*



*PowerSeraya's High Thermal Efficiency Cogeneration Power Plant Officially Launched on 20 October 2010*

PowerSeraya's latest 800MW High Thermal Efficiency Cogeneration Plant was officially launched on 20 October 2010. The establishment of the plant marks the company's enhanced capability to generate electricity as well as steam. The Cogeneration Plant is designed for increased thermal efficiency of up to 60% (a milestone efficiency achievement in the company's history) to deliver cleaner energy and steam to customers with higher reliability and availability.

Utilising state-of-the-art technology, PowerSeraya is able to harness waste heat produced from the electricity generation process in the Cogeneration Plant and utilise water from its own SeaWater Reverse Osmosis (SWRO) Desalination Plant to produce high-pressure steam. This not only aligns with Singapore's Sustainable Development Blueprint's goal of achieving resource efficiency, but is also expected to decrease the company's overall carbon footprint by a further 10%.

On 22 March 2011, PowerSeraya's 800MW Cogeneration Plant was awarded the "Most Technologically Advanced Power Plant of the Year" at the Asia Power & Electricity Awards 2011. The award took into consideration the plant's ability to make capable use of technologies to produce electricity cost-effectively, profitably and in an environmentally-sound manner.

### *Energy Efficiency Measures*

In addition to greening its infrastructure, PowerSeraya has also managed to inculcate sustainable office resource practices among its corporate office staff. Besides achieving an estimated savings of S\$14,970 over the last two years, these measures have also helped to reduce more than 33,000 kilograms of CO<sub>2</sub> emissions. In 2009 alone, paper conservation measures have saved 275,000 sheets of A4-sized paper – which translates to 24 trees being saved. PowerSeraya believes that small steps taken can certainly create an impact, and this belief is reflected in the substantial savings and CO<sub>2</sub> emission reductions it has successfully achieved through simple practices to keep resource consumption in check.

### *Community Engagements for the Environment*

#### *NEA-Mediacorp Run*



*PowerSeraya CEO John Ng receiving a "Plaque of Appreciation" at the NEA-Mediacorp Run*

Formerly known as the Semakau CEO Run, PowerSeraya has been supporting this annual event since its inception in 2007. In 2010, PowerSeraya's S\$15,000 donation to this fund-raising run supported the works of environmental NGOs as well as social services charities, namely the Singapore Environment Council, the Singapore Institute of International Affairs, Nature Society Singapore, HCA Hospice Care, Amalgamated Union of Public Daily Rated Workers and the Rainbow Centre – Yishun Park School. Five staff participated in the recent fund-raising run



held at Singapore's only landfill island, Pulau Semakau. John, the CEO of PowerSeraya, took part in the 2.5km competitive run while other staff took part in the 5.0km competitive run or the 1.5km fun walk. As a platinum sponsor of the run, PowerSeraya was presented with a plaque of appreciation for the contributions the company has made to support the good work of the NGOs.

#### *PowerSeraya celebrates Earth Hour 2010*

On 26 March 10, PowerSeraya's HQ office and the Management Centre of its power plant in Jurong Island, Singapore observed **Earth Hour** by switching off all the office lights from 11AM right through lunch time. In an extra effort to conserve more energy, staff were also asked to minimise standby energy by switching off their PCs/notebooks at the power sockets after shut-down during their lunch. Throughout the duration that the lights were switched off, some staff made use of natural light to continue their work by rolling up the window blinds. This is the third year that PowerSeraya has observed Earth Hour since the global initiative first started in 2007.

#### *1 Degree UP Challenge*



*An interactive exhibition on energy conservation at the 1 Degree Up Challenge*

The company organised the 1 Degree Up Challenge in celebration of World Environment Day which fell on 5 June 2010. This is the third consecutive year that PowerSeraya has organised this initiative, in partnership with its landlord Mapletree. The event, of which the primary objective was to spread the message on energy conservation and climate change, called upon all office tenants at HarbourFront Towers to raise their office temperature by one degree or to maintain at the energy-conserving temperature of 25 degrees Celsius.

To raise greater awareness, a mini exhibition cum energy conservation games was also organised at the lobby of the office building to engage participants. Similar to the previous year, the initiative was well received with a participation rate of close to 100% from 40 companies in HarbourFront Towers – this added up to 3,000 office workers who helped made a difference.

#### *PowerSeraya launches Inaugural Sustainability Programme*



*The REAP Team*

The pilot run of PowerSeraya's sustainability programme **REAP (Responsible Energy Advocates Program)** was launched in June 2010. Jointly developed with partners the National Environment Agency of Singapore and South West Community Development Council, REAP is the only 3P (Private, Public & People) sustainability programme that is centric on energy conservation and one that holistically integrates the education, community service and project work component to benefit students and the community in Singapore.

The pilot run saw a batch of 15 students from different tertiary institutions in Singapore coming together to fulfil the Education, Community Service and Project Work components of REAP. The Education programme component comprises a four-day sustainability workshop where students go through a systems thinking exercise on sustainability. They later advance to the Community Service component where each student pair will help several households in the south west district save energy over a three month period. The programme then culminates with students developing a project centred on energy conservation. The results of the pilot programme were encouraging with 60% of the households achieving energy savings during the three-month energy monitoring period. Six projects ranging from topics on renewable energy for high-rise buildings and sustainable policies to biofuels for campuses were developed among the 15 students.

Please see [www.powerseraya.com.sg/sustainabilityreport2010](http://www.powerseraya.com.sg/sustainabilityreport2010) for PowerSeraya's Sustainability Report 2010.

- **ElectraNet Transmission Services Pty Ltd, Australia**

ElectraNet Transmission Services Pty Ltd is the transmission company for ElectraNet Pty Ltd (ElectraNet), the Group's 33.5% indirect investment in Australia. The company operates in line with a Code of Sustainable Practice and its environmental policy provides a framework to ensure that environmental considerations are included in the planning, design, construction, and operational phases of all business activities. The business is also proactive in its general environmental responsibilities and conducts environmental audits on its substations and equipment on a regular basis.

On a global scale, the company is actively involved in facing the challenges of climate change and remains committed to reducing its impact on the planet. Some of the ways this is accomplished include:

- Investigating options to make the company carbon neutral;
- Contributing to the National Greenhouse and Energy Reporting (NGER) Scheme
- Representing the energy sector in the State Government's environment consultation group;
- Supporting transmission connections with more environmentally-friendly energy technologies such as geothermal, windfarms and solar power;
- Introducing programs to educate staff about ElectraNet's environmental responsibilities and issues that impact on the business; and
- Encouraging staff to decrease their personal impact on the planet.

ElectraNet's environmental and community initiatives also include:

- The Australian Government's Greenhouse Challenge Plus – a range of activities which raise awareness of its efforts to minimise climate change impacts;
- Trees for Life – an organisation which supplies up to two million local native plant seedlings per year for regenerating farmlands and parks throughout South Australia;
- Barossa Blue Gum Woodlands Reforestation Project – a project funded by ElectraNet as part of its efforts to involve and provide community benefits to locally affected communities; and
- Aboriginal Heritage issues – these 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. Please see: [www.electranet.com.au/environment/environmental-action](http://www.electranet.com.au/environment/environmental-action).



*Blue Gum Woodland site established within the Barossa Bushgardens, sponsored by ElectraNet*



*Revegetation of pastureland surrounding ElectraNet's Tungkillio substation in the Adelaide Hills*



*ElectraNet contractors conducting a revegetation program on the Eyre Peninsula in South Australia*

## Water & Sewerage Services

*Wessex Water, United Kingdom*



The Group owns a 100% stake in Wessex Water, one of the most efficient water and sewerage operators in the UK. In 1996, Wessex Water committed itself to becoming a sustainable water company and since then, it has experienced 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. Wessex Water considers sustainable development to be a set of activities that help society move towards sustainability.

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 as well as their partnership work with stakeholders.



Wessex Water is recognised by its industry regulator, the Water Services Regulation Authority (known as Ofwat), as the best performing water and sewerage company in England and Wales, receiving the highest ever Overall Performance Assessment (OPA) score in the industry since the measure was introduced. The company also maintains some of the highest standards of customer service, remaining at the top of Ofwat's independent survey of customer satisfaction with telephone service. As the result of its work in maintaining and continually improving on an excellent standard of customer service, Wessex Water received the "Best Customer Service" and "Best Creditor" awards from the Citizens Advice Bureau in 2009 – 2010.

Wessex Water made history in 2009-10 as the first water and sewerage company to go two consecutive years without a single category 1 or 2 pollution incident, which are defined as events having a persistent, extensive, major impact on the environment (category 1) or causing significant damage to the aquatic ecosystem (category 2). Other environmental achievements for Wessex Water in the year under review include increasing its renewable energy production to 15% of total demand, being conferred the "Green Apple Environment Award" for its *Biodiversity Partners Programme* covering the last four years, and achieving ISO 14001 accreditation for environmental management within its Wessex Engineering and Construction Services division.

Recently, Wessex Water was awarded another two "Green Apple Awards" in "Environmental Best Practice" for its catchment management and waste reduction programmes along with its recycling projects, competing against 500 other nominations. Wessex Water's catchment management work, launched in 2005, is a cheaper and greener approach to safeguarding drinking water supplies by working with farmers to stop pollutants entering water sources. Meanwhile, the waste reduction and recycling programme was developed to manage waste effectively and responsibly through reuse and recycling facilities which will help the company meet its goal of zero waste to landfill by 2020.



*Staff conducting soil tests as part of Wessex Water's catchment management work*

Wessex Water continues to be a signatory of the *UN Global Compact*, a strategic policy initiative for businesses that are committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption. By doing so, business, as a primary agent driving globalisation, can help ensure that markets, commerce, technology and finance advance in ways that benefit economies and societies everywhere. The Global Compact is a voluntary initiative relying on accountability and transparency.

### **Bathing Water Quality**

While a range of factors can affect the cleanliness of beaches and bathing waters, Wessex Water helps maintain the quality of local bathing waters by carefully managing effluent and storm waters discharged from its sewerage assets. The recent trend of excellent bathing water quality within the Wessex Water region continued in the 2010 season:

- every designated bathing water achieved 100% compliance with the mandatory water quality standards, for the seventh year in a row; and
- 87% also complied with the stricter guideline standards.

The revised Bathing Water Directive, when implemented in 2015, will tighten water quality standards and increase the availability of information about bathing water quality and

beach facilities. Work has begun to meet these new requirements in advance. This includes a GBP£26 million scheme at Weston-super-Mare sewage treatment works (STW) to increase secondary treatment, ultraviolet disinfection capacity and storm storage.

During times of intense rainfall, sewers can become overwhelmed. These events can lead to the discharge of diluted sewage from combined sewer overflows into water courses to prevent the flooding of property, highways and open. Wessex Water recently launched a new “online discharge notification system” providing information on waste water spills near designated bathing waters across the whole of their region. They are the first water and sewerage company to do this. This system allows anyone to check if there has been a recent waste water discharge from a nearby combined sewer overflow. This system has been supported with online guidance and information to allow users to make informed choices when looking to enjoy these waters.

In May 2010, Wessex Water also began a three year investigation aimed at better understanding bacterial contributions from their sewerage assets and those from other sources, for example, agriculture on bathing waters. The first year of investigations were a success and are now focusing on the influence of wet weather events on the performance of assets and the quality of receiving water bodies that affect bathing waters.



*Wessex Water's new Bathing Water Directive will enhance bathing water quality standards*

### *River and Reservoir Water Quality*

Over the last year Wessex Water began a series of investigations to better understand their impact on the freshwater environment. These include:

- Monitoring rivers where they have reduced their abstractions as a consequence of previous low flow investigations on the River Bourne, Hampshire Avon and Chittern Brook during 2005 – 2010;
- Investigating the effects of their abstractions on the Teffont Brook, Upper Hampshire Avon, Heytesbury Brook, Bere Stream and River Way;
- Investigating nutrient cycles and phosphorus inputs at three of their reservoirs to ensure they meet their Water Framework Directive targets. This also aims to identify any opportunities for operational optimisation; and
- Trialling various media types in constructed wetlands to see how effective they are at removing phosphorus from final effluent.

The first year of these projects has provided useful data that Wessex Water will build on over the next two years as they plan future investment needs for 2015 to 2020. The company's expanding catchment management activities now cover 15 catchments where nitrate or pesticide pollution is having an impact on raw water quality. A team of six agricultural advisors provide advice and work in partnership with farmers to help reduce the impact of agriculture on their aquifers and reservoirs. By identifying and dealing with inputs at source, they are able to provide a more sustainable and economic solution, as opposed to building new energy and chemical intensive end-of-pipe treatment processes.

### Carbon Management

With the advancement of technology and the development of reliable processes, great improvements have been made in the water quality of coastal and inland waters, as well as the UK and Wessex Water's drinking water standards which remain some of the best in the world. These improvements have been necessary to meet increasingly tight quality standards and have been achieved using reliable processes; However, these processes are often energy and chemical intensive, with implications for Wessex Water's carbon footprint.

Wessex Water has long recognised that significantly reducing its carbon footprint is essential, and has set itself the ambitious long-term goal of *becoming carbon neutral* and keeping its emissions on track with the UK Climate Change Act's required emissions cut of 80% between 1990 and 2050. To achieve this, an ongoing carbon management strategy has been implemented, based on the hierarchy of emissions avoidance, energy efficiency, and renewables. This combines specific carbon-cutting initiatives with a number of management measures to ensure carbon management is built into decision-making and operational activity.

To achieve this, Wessex Water has an ongoing carbon management strategy based on the hierarchy of emissions avoidance, energy efficiency and renewable energy. This combines specific carbon-cutting initiatives with a number of management measures to ensure carbon management is built into decision making and operational activity. As a result, carbon reporting and management is now much more central to their activities. In 2010 – 2011, Wessex Water continued action to reduce their emissions through avoidance measures, energy efficiency projects and increasing renewable energy generation. As such, its renewable energy portion rose to around 35% of total energy used derived from biogas, wind, solar and biomass. Total renewable energy was 18 MW in 2010, rising to 23 MW in 2011.

### Energy Efficiency

In 2010 – 2011, the company continued to reduce its emissions through a number of energy efficiency projects and increased focus on optimising its renewable energy production. There are now more than 300 efficiency projects in Wessex Water's Energy Management Database, with an increasing number coming from the water production and supply side of their activities. These include:

- A pumping efficiency programme focused on identifying and rectifying inefficient pumps and systems in all parts of the business;
- Installation of a micro water turbine at Sutton Poyntz water treatment works; and
- Identifying suitable locations for the installation of solar-PV systems.

A Project investigating the benefits of an advanced process control system at Holdenhurst Sewage Treatment Works (STW) proved successful. This new technology has now been implemented as standard operational practice at this site producing excellent power reductions. The possibility of adapting similar controls at other sites is being investigated with further projects likely to be implemented next year.

Refurbishment of aeration at Weymouth STW to reduce the amount of air being pumped into the disinfection process has resulted in significant power savings with an energy cost reduction of around GBP£160,000 per annum. The company is also reviewing advances in UV disinfection technology and will be testing the efficiency of new lamps at this site to see if more energy savings can be made.

To help steer future work, Wessex Water has increased the coverage of automated meter readers that provide accurate data, helping them to identify problem sites early and minimise inefficient operation.

## Renewable Energy Generation



*Biogas digestors at Wessex Water produce an alternative fuel that has successfully powered a modified car*

Over the last year, Wessex Water's investment in advanced digestion and increased focus on the optimisation of digesters and maximisation of biogas production has had great benefits for their renewable energy production. This work has been led by GENeco, its "waste to energy" company and distinct entity, to operate its Bristol STW and Berry Hill sludge treatment centre. One of the sites operated by GENeco, Bristol STW, is now a net exporter of energy to the national grid.

Outside the regulated business, Wessex Water has continued its work on:

- Possible investments in food waste digestion in Bristol;
- Planned wind turbine installation at Bristol STW, which could generate an estimated total of 20 gigawatt hours (GWh) each year from four proposed turbines; and
- Investigating other smaller projects (for example, hydro and other sites suitable for medium or large wind energy generation).

In 2010, Wessex Water's GENeco also innovated and developed the UK's first methane-powered car, powered from human waste. The car, termed the *Bio-Bug*, runs on methane gas generated during the sewage treatment process. Waste from 70 homes is sufficient to power the modified Volkswagen (VW) Beetle for a year, or about 10,000 miles. Around 18 million cubic metres of biogas is produced at Bristol sewage treatment works a year. It is generated through anaerobic digestion – a process in which bugs in the absence of oxygen break down biodegradable material to produce methane.

The Anaerobic Digestion and Biogas Association (ADBA) said the launch of the Bio-Bug proved that biomethane from sewage sludge could be used as an alternative fuel for vehicles. If all of Avonmouth's methane was used for vehicles, it could avoid 19,000 tonnes of CO2 emissions per year. Additional uses for biomethane include sludge pellets as fertiliser or fuel, such as is currently being produced in Holland.



*The Bio-Bug, developed by Wessex Water subsidiary GENeco, runs on biogas generated from the sewage treatment process*

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

## CEMENT MANUFACTURING



The Group's cement manufacturing division is one of the largest, most efficient, and most profitable manufacturers of cement and ready-mixed concrete products in Malaysia. The Group owns over 70 batching plants and a fleet of 700 cement trucks operating throughout Malaysia, Singapore and China. YTL Cement Marketing Sdn Bhd was also recently elected as the *Industry Confederation Partner of the Malaysia Green Building Confederation* on 12 October 2010.

Industrial waste from the cement manufacturing process is comprised largely of fly ash, kiln dust, lubricants, kiln bricks, concrete wash water, and airborne particulates. YTL's cement plants are designed to return kiln dust or air borne particulates generated by the cement-making process (collected with fabric filters or electrostatic precipitators) to the system. All waste materials are sent for recycling where possible and the Group's integrated plants in Pahang and Perak are ISO 14001 compliant.

Our Pahang cement plant has obtained ISO 9001 (Quality Management System), ISO 14001 (Environmental Management System), OHSAS 18001 (Occupational Safety and Health Management System) and ISO/IEC 17025 (Laboratory Accreditation and Management System) certifications and is rated '4 Stars' by the Independent Cement Producers Association (ICPA) in London based on the plant's comparative performance in safety and manpower productivity, energy efficiency, and environmental performance. The EMS programme is designed 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 working environment.

Notably, in June 2011, the Batu Caves terminal was awarded ISO 9000 2007 certification.

It is notable that YTL Cement is one of Malaysia's first local slag cement producers and suppliers, commencing in 1997 before the advent of the Kyoto Protocol and Clean Development Mechanism (CDM). It was supplying between 20% and 70% of double and triple blended products locally by blending PFA (Pulverised Fuel Ash), GGBS (Ground Granulated Blast Furnace Slag), Copper Slag & Raw Limestone, thereby reducing clinker and CO<sub>2</sub> emissions.

In April 2010, Slag Cement Sdn Bhd and Slag Cement (Southern) Sdn Bhd, wholly-owned subsidiaries of the Group, received certification for their products from the Singapore Environment Council (SEC) under the *Singapore Green Labelling Scheme (SGLS)*. SLAG Cement received this certification for six blended cement products in 2010.

The products that were certified included ground granulated blastfurnace slag, blastfurnace cement CEM III/A, blastfurnace cement CEM III/B, and Portland composite cement CEM II/B-M manufactured at the Group's Westport plant, and ground granulated blastfurnace slag and blastfurnace cement CEM III/A manufactured at the Group's Pasir Gudang plant. The certification indicates that these products are eco-friendly building materials which make an important contribution to environmental sustainability and the reduction of carbon emissions.



Slagcem 50, Slagcem 70, Slagcem GGBS and Dragon have been certified as eco-friendly cement by the Singapore Environment Council as Singapore Green Label certified products. YTL Cement also pioneers educational seminars and training sessions dedicated to promoting the usage of eco-friendly cement to employees and stakeholders. See Chart as follows:

Educational seminars and trainings to promote the usage of eco-friendly cement		
Year	Seminar and trainings	No. of participants
2011 (1 <sup>st</sup> Quarter)	12 sessions	360
2010	20 sessions	450



Both the Westportand PG Plants have also successfully carried out a CO<sub>2</sub> Audit for the products concerned and obtained the audit report from the Standards and Industrial Research Institute of Malaysia (SIRIM Berhad, the national organisation for standards and quality, and a promoter of technological excellence in the Malaysian industry) certifying the low CO<sub>2</sub> content in their Green Label certified products. Notably, SIRIM Berhad and Malaysia's Construction Industry Development Board (CIDM) are now in the process of establishing the criteria for eco-cement labelling. YTL Cement has participated actively in this Committee to support the efforts of both SIRIM Berhad and CIDM.

At our Perak plant, a number of operations improvement projects geared towards increasing production, improving product quality, and reducing costs have been underway for the past four years. All of these projects, including recycling and reuse, have also improved the energy efficiency of the plant and reduced carbon dioxide (CO<sub>2</sub>) emissions. The modernisation and improvement projects completed at Perak-Hanjoong include:

- Installation of modern high efficiency separators on the raw and coal mills, resulting in increased production, improved burnability, and reduced electrical power consumption;
- Installation of static inlet grate on the PL2 clinker cooler which improved the clinker quality and significantly reduced the fuel consumption of the kiln, and
- Installation of the clinker cooler and replacement of its ancillary equipment at PL1 line with a modern, efficient and low-maintenance design, resulting in reduced fuel consumption of the kiln, optimised clinker quality, reduced maintenance costs, and an increased run factor resulting in higher annual clinker production.

#### *Usage of Alternative Raw Materials and Fuels*

The Group's cement operations have been working towards lowering their CO<sub>2</sub> emissions in Malaysia since 1997, beginning with our Pahang plant which switched from iron ore to copper slag in the production of blended cement. The usage of copper slag not only helps to avoid large emissions of CO<sub>2</sub> but it also helps to improve the process and quality of clinker, which has a beneficial effect on profitability. The Group continues to refine and further develop blended cement products, and has begun exporting the blended products to Singapore.



#### *Fuel switching from coal to:*

- Biomass waste: Empty Fruit Bunch, Palm Kernel Shell, EFB & PKS Briquettes & Pellets
- Shredded Used Rubber Tyres
- Waste Solvents

In 2009, the division carried out fuel replacement of light fuel oil with residual fuel oil, thereby reducing emissions. It also commenced trials for fuel-switching from coal to waste products and materials such as empty fruit bunches and palm kernel shells from the palm oil industry, shredded and used defective rubber tyres, scheduled waste liquids such as solvents, and industrial sludge pellets. A system for storing and transporting the new fuel feedstock was built in an approximately RM4 million project. The utilisation of the new system reduces the use of coal and its subsequent carbon emissions, replacing the fossil fuel with carbon-neutral palm oil plantation and mill waste and less carbon-intensive feedstock such as rubber tyres and solvents. At our Perak plant, industrial gypsum from PowerSeraya in Singapore is also being used to partially substitute natural gypsum.

New projects include the successful implementation this year of an initiative to utilise used tyres as an alternative fuel for the plant's kilns, which has reduced the usage of coal and reduced fuel costs for clinker production. The plant has also embarked on trials for the use of other alternative fuel materials such as carbon black (a material extracted from tyres), as well as wood chips from discarded furniture. The substitution of raw materials with alternative sources at both plants have had the twofold effect of reducing the carbon impact on the environment, while achieving substantial cost savings and increased efficiency at the same time. So far, 893 tonnes of coal have been substituted with used rubber tyres.

- **Monitoring Dust Emissions**

The stack emissions from all cement plants are continuously monitored in line with Department of Environment (DOE) regulations, and all dust emission levels have complied with the current DOE requirements to date.

- **Waste Management**

YTL's cement division has an *Environmental Policy* outlining proper waste management procedures and inventories on how much industrial waste is generated and reused. There is typically no waste generated through cement production as by-products. However, there is some industrial waste due to maintenance work such as used or spent

refractories, lubricants, and burst paper bags, most of which are recycled. Waste refractories, burst bags, and spent oil are almost 100% recycled, while 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 is also sold to recyclers. Used grease and contaminated gloves go back into the firing stream to become partial replacement of fuel, while burst paper bags go as fuel into the firing process.

In striving to continually reduce costs and improve quality while ensuring protection of the environment, the division has several projects lined up for 2010 and beyond, including:

- A new coal mill which will reduce specific heat consumption and coal usage while increasing clinker production;
- Partial substitution of coal with Blended Fuel Oil (BFO) at its Perak plant, and
- The instalment of new equipment that will reduce and improve maintenance activity, resulting in greater efficiency and power consumption savings.

#### **Current and Future Projects**

Currently, the Penang 2nd Bridge is being constructed using Mascem and Slagcem GGBS supplied by YTL Cement Berhad. Many major projects such as the LRT extension is also now considering the use of Mascem and Slagcem GGBS for its construction. Hence, we are seeing greater acceptance of these eco-friendly and high quality cements being used for major projects.

The company has regional expansion plans and is currently evaluating investment opportunities in Singapore, China, The Middle East and Indonesia. The acquisition of the Jin Yuan cement company in Zhe Jiang Province, China, further complements 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 Sdn Bhd, the

project could generate RM2 million to RM3 million per year in extra revenue from carbon credits. The savings in fuel costs are also significant. Notably, YTL Cement's Waste Heat Recovery Project in China has already reduced 45,000 tonnes of CO<sub>2</sub> a year from 2010.

Visit [www.ytlcement.com/index/index.asp](http://www.ytlcement.com/index/index.asp) for more information on YTL Cement.

## EXPRESS RAIL LINK

### KLIA Ekspres

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

Recently, ERL was honoured with two accolades at the inaugural Global AirRail Awards 2011, with its *KLIA Ekspres VIP Service* attaining the "Best Customer Service" award, and Chief Executive Officer Noormah Mohd Noor being named "Personality of the Year". These awards collectively recognise the staff's outstanding efforts in delivering high levels of service and consistency across all operational areas.



*Express Rail Link (ERL)*

The 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 ERL's wholly owned subsidiary, ERL Maintenance Support Sdn Bhd (E-MAS). E-MAS recognises the need to be as environmentally-friendly as possible and 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.

In 2009, KLIA Ekspres launched a *Go Green, Go Lo-Co<sub>2</sub> (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. 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.



*KLIA Ekspres CEO Noormah Mohd Noor (center) with host and Air Rail News Editor Milda Manomaityte (left) at the Global Air Rail Awards 2011*



As part of its campaign, ERL 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. Initiatives by ERLSB 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 pioneered was a nine to tenfold lifetime extension of the train wheels.

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:

- Equipping new trains 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; and
- Participating in global climate change initiatives such as "World Environment Day" and "Earth Hour".

#### Initiatives taken by Maintenance include:

- 75% reduction of operations hours of spot cooling at Kuala Lumpur International Airport (KLIA);
- Bulk Handling Systems (BHS) conveyors shutdown during off peak hours;
- Air Handling Units (AHU) shutdown at KLSS arrival platform on weekends;
- Reduction of chiller operational hours at Workshop;
- Replacement of fluorescent lighting with energy saving lighting;
- Closure of air louver in train baggage compartment;
- Train-borne energy meter installation; and
- Optimisation of shunting locomotive operations.

Through maintenance measures, there has been an estimated savings of RM224,000 per year (24% reduction).

#### Initiatives taken by Operations include:

- Improving Driving Profile;
- Single Platform Operations for KLIA Ekspres;
- Off-peak scheduling for KLIA Ekspres during weekends; and
- Shutdown of trains stabled at Kuala Lumpur Sentral Station (KLSS).

Through these operational measures, there has been an estimated savings of RM26,300 per year (4.4% reduction).

#### Other ongoing initiatives include:

##### *Rain Water Harvesting (studying feasibility)*

- Going Green by using natural sources and reducing dependency on treated water, thus reducing costs.
- *Intention:* To use rain water for non-potable use at Main Workshop and for Train Washing Plant.

### Environmental Management System (ISO 14001:2004)

- Verifying the System complies with environmental laws and regulations to gain a competitive advantage and to build goodwill with customers, employees, and stakeholders.
- May be required by clients, customers and/or regulators,
- *Target certification:* By March 2012



Minister of Energy, Green Technology & Water, YB Datuk Peter Chin Fah Kui launches KLIA Ekspres' Green Campaign, "GO LO-CO2"

E-MAS has also embarked on a "3R Project" jointly with ERL 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 also 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.

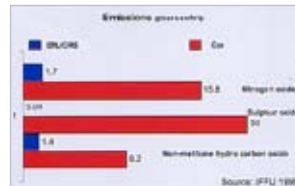
Timers are also set to turn off lights during non-operational hours and plans have been made to switch to energy saving lighting.

- **Optimising building air-conditioning 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.

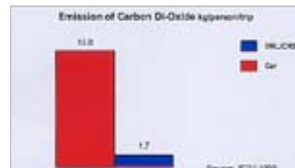
From an environmental perspective, the emission of greenhouse gases (GHGs) is a critical issue for all modes of transport. The following diagrams show a comparison of emissions between the REL/CRS system and a car over a distance of 60 kilometres, approximately the distance between KL Sentral Station 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



The following chart shows the emissions for carbon di-oxides



Visit [www.kliaekspres.com/erlsb/Home/ERLGoGreen/tabid/195/Default.aspx](http://www.kliaekspres.com/erlsb/Home/ERLGoGreen/tabid/195/Default.aspx) for more information and details on KLIA Ekspres' environmental campaign.

## PROPERTY DEVELOPMENT & SUSTAINABLE DESIGN

### Malaysia

As part of its ongoing efforts to inform and engage its stakeholders, YTL Land & Development Berhad organises events at its residential property developments, including Lake Edge in Puchong and Lake Fields in Sungei Besi, as well as Pantai Hillpark and Sentul in Kuala Lumpur. Residents of these developments have proven genuinely enthusiastic about attending these events to learn more about recycling initiatives and share ideas with other community members. Residents of Lake Edge, which is a gated community in Puchong, and Sentul East & West in Kuala Lumpur, which is being developed around a 35-acre gated park, have been particularly dedicated to improving the recycling culture and cultivating sustainable ideas and habits within their communities.

Previous events have included "Recycling Day", organised in collaboration with Alam Flora Sdn Bhd to assist residents in recycling paper, aluminium cans, plastic, metal containers and glass bottles. "Clean Out Your Clutter" day, an initiative where collection services are provided to assist residents who wish donate unwanted furniture, was also organised in collaboration with Persatuan Kristian Shuang Fu, a non-profit organisation which trains the disabled and underprivileged by giving them vocational training. Meanwhile, "3R Robot" workshops were also held to encourage children to reuse existing materials to construct new toy robots out of broken toys, disposable cutlery, plastic cups, cartons, plastic bottles and stationery.

Both our in-house 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. YTL's construction arm, Syarikat Pembinaan Yeoh Tiong Lay (SPYTL) Sdn Bhd, also recently won the Award for "Building Construction Contracting Company of the Year" at Frost & Sullivan's 2010 Malaysia Green Excellence Awards.



*"3R Robot" workshops educate children on the importance of recycling while incorporating the element of fun*



*Residents of Lake Edge participate in dedicated recycling and tree planting efforts within the community*



*At The Maple, Sentul, recycling bins have been creatively painted with a unique, compelling message to recycle*

Some of YTL Land's developments and projects which incorporate green and sustainable design features include the following:

#### *Centrio at Pantai HillPark*



*Green Landscaping at Centrio, Pantai HillPark*



*SOHO suites overlooking a 50-metre lap pool*

In July 2011, Centrio won the 2011 PAM (Malaysian Institute of Architects) Award for the "Multiple Residential – High-rise" category. Besides the PAM Award, Centrio has won four other awards at CNBC Asia Pacific Property Awards 2009 for "Best Mixed Development" and "The Architecture Award" under the Commercial category and "Best Architecture" and "Best Property Marketing – Residential".

As the commercial hub of Pantai Hill Park, Centrio has combined living and work spaces into an innovative SOHO (Small Office, Home Office) concept. The development comprises 5 interlocking low-rise blocks, set in landscaping with gardens and water features. Retail lots are arranged along Jalan Pantai Murni to create a dynamic streetscape with 10-metre wide al-fresco plazas and walkways. SOHO units are stacked above the gardens at podium roof level, with a north-south orientation that allows optimum views and façade variation.

Gardens, water features and courtyards are extensive throughout the development, and interspersed between blocks to reduce ambient temperature. Rain-water harvesting is used for landscape irrigation, so that the extensive landscape is sustainable without consuming potable water. Variety is also part of the overall spatial experience, with connecting bridges connecting each block. Centrio's design creates an environment that encourages new ways to balance life and work.

#### *Design Significance*

Centrio is significant in its integration of working and living space, from individual unit layouts to the overall development layout. The SOHO units feature double-volume living areas that connect via staircase to upper level offices or bedrooms. This configuration includes full height windows and sliding screens, which allow for natural daylight with views overlooking landscaped areas. Selected units also have adjacent private gardens, courtyards and skydecks to create distinctive variety from the work space.

The individualistic design of SOHO units is further complemented by extensive landscaping, easily accessed via link bridges and decks between blocks. Recreational facilities at podium roof level include gardens, a swimming pool, gym and playground, along with two swing meeting cubes which allow users the flexibility of a larger gathering space. From each block of interlocking SOHO units, Centrio is varied and yet distinct, where elements are unified by staircases, decks and bridges.

### *Sustainable Construction Materials and Methods*

The design of Centrio involves many sustainable design strategies, such as rain-water harvesting and building orientation to ensure maximum user comfort with reduced environmental impact. This was followed through in the construction of Centrio, by using green materials and methodology. Shera boards at external areas reduced construction time by being more durable and easier to install than timber decks. ALC brick was used for internal walls to reduce loading and improve insulation, with a relatively low environmental impact by saving energy during transportation (at one fifth the weight of regular concrete). System formwork was used for the concrete structure, so that the formwork could be re-used. Other structures such as the bridges, canopies, swing meeting cubes and trellis were constructed in steel. Centrio is a development that has been designed to be sustainable and was also built sustainably.

### *Sentul Station*



*The new KTM Sentul station in the day*



*The station at night*



*A pedestrian bridge linked to the station covered by a curvilinear roof*

The new Sentul KTM Station was designed to be a gateway to the urban regeneration of Sentul. It replaces an existing KTM station, as part of upgrading works under the 6th Malaysia Plan that includes electrified double tracks and new stations from Taman Wahyu up to Batu Caves. The design objective is to encourage the use of public transport in Sentul and sustain a vibrant community. The station also highlights accessibility, with disabled-friendly access, and connectivity with extensive drop-offs and link-bridges.

The new station consists of two platforms covered by cantilevered roof forms with the station concourse and ticketing areas located in the futuristic curvilinear roof form. The concourse is linked over the railways lines to both Sentul East and Sentul West via connecting bridges. With its dynamic form, the new Sentul station is a marker for the surrounding area and the future of train travel in the city.



### Design Significance

Sentul's history is linked closely to that of the railways in Malaysia, when it was the site of the country's first integrated workshops and engineering facilities. With this new KTM station, the design represents the advancement of railways in Malaysia and improvement of train travel in Kuala Lumpur. The design is significant as it is one of the most dynamic and user-friendly train stations in the city.

The station layout takes into account several factors, including passenger experience and operational facility. The distinctive roof form was conceived to be an iconic landmark for Sentul, evoking the thrill and convenience of contemporary rail travel. It is also designed to be sustainable, with design features such as a void over the platforms and double-storey roof volumes to encourage natural cross-ventilation. The new Sentul KTM station is a modern icon that celebrates the use of public transport.

### Sustainable Construction Materials and Methods

Construction of the Sentul station was especially complex as it had to be built over an operational electrified track. As such, the platforms were constructed in 2 stages and the cantilevered roof form was designed to accommodate this phasing. CNC technology was used for the structure of the main curvilinear concourse, to control the radius of the curvature. The link-bridge structure used precast M-beams to achieve a longer span to connect Sentul East and West. The construction process was therefore expedited by using pre-cast elements and structural steel, which reduced construction waste.

### Lake Edge at Puchong

At Lake Edge, Puchong, the concept was to bring a truly different kind of living in a familiar neighbourhood, building a sense of community and encouraging interaction among residents. As Puchong's first gated lakeside development, Lake Edge has certainly lived up to its promise of



*The Linear Park @ Lake Edge features green spaces designed to integrate residents with nature*



*Waterville Semi D @ Lake Edge*

offering a truly different kind of living concept. Here, charming homes, the outdoors and the community come together in a lake themed lifestyle set in a modern, tropical neighbourhood located just 20 minutes from Kuala Lumpur.

Lake Edge was modeled after Australia's green street concept where landscaping would promote a thriving community by encouraging residents to enjoy the outdoors, interact with nature and their neighbours. To foster a stronger sense of the community spirit, walls and hedges that usually demarcate property lines have been eliminated in favour of fenceless homes set in open greens. Integrated open spaces were also designed to encourage social outdoor activities, thus fostering communal ties further. The result is a repertoire of lifestyle components, urban elements, architectural forms, and landscape that invite interactions with the environment and provide a varied urban living experience.

### Sentul Park



*Green private-gated park living at Sentul Park*



*Lush natural greenery is preserved beside a peaceful lake at Sentul Park*

YTL Land & Development Berhad was proclaimed a leader in sustainability practices in the Malaysian property industry, according to a study done in 2008. The company has won numerous awards for the design of its property developments and is consistently mentioned for having outstanding results and for being a strong supporter of sustainability. This brings us to our most outstanding 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.

### About Sentul West and Sentul East

The purpose behind Sentul East and West at Sentul Park was not only to renew its physical environment and wealth but also to renew the community and its 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"** and was the Winner of the PAM (Malaysian Institute of Architects) Award in 2006 in the **"Adaptive Re-use"** category for the KL Performing Arts Centre. In the CNBC Asia Pacific Property Awards 2009, YTL Land won 7 Awards in total for its three projects – Centrio at Pantai Hillpark, The Maple at Sentul West and Lake Edge at Puchong. The Awards are a testament towards the growing support of sustainable developments both locally and worldwide.

Designed to revitalise and regenerate this historical part of KL, Sentul was conceptualised in two distinct areas; Sentul West and Sentul East, each characterised by its own unique personality. Sentul West is a haven of greenery, housing exclusive residences, offices and shops bordering on a 35-acre private gated park. The Maple at Sentul West is the only residence in Kuala Lumpur with a private gated park, providing the perfect

setting for the creation of a unique park community right in the heart of the city centre. Defining a new way of life, camping, bird watching, boating, outdoor movies and concerts are just some of the activities that residents of The Maple can enjoy in Sentul Park, a sprawling private park located just outside their doorstep. And for a taste of the arts & culture, the Kuala Lumpur Performing Arts Centre (KLPac) and Sentul Park Koi Centre are just a short walk away.

Sentul East was developed in the context of Jalan Sentul, seen as a combustion of vibrant Malaysian flavours that sets the tone for modern downtown living while retaining the colourful heritage of Sentul. In total the master plan covers 294 acres of prime freehold land and will be completed in phases over the next 10 years. Sentul East currently features a thriving residential and commercial community with d7, two sell-out projects The Tamarind (completed in 2005), The Saffron (completed in 2008), and the soon to be launched, The Capers, a testament to the changing face of the 100-year old former railway town that is now a draw for the young modern crowd.

YTL realises that going green is a growing trend among sophisticated homeowners and communities worldwide. So in its Sentul project, it 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 believing this will enhance the quality of life of the people who buy our properties. This philosophy has been adopted throughout all the Group's current residential property developments, such as Lake Edge in Puchong, Lake Fields in Sungei Besi and Pantai Hillpark, with focus placed on reducing the number of units in favour of maintaining a balance between nature and development while adopting building and design techniques that make the most of natural sunlight and improve airflow to reduce the need for artificial light and air-conditioners.

### New Green Developments At Sentul

#### *YTL Communications Centre and Networks Operation Centre (NOC) at Sentul Park*

YTL Communications (YTL Comms) is the newest addition to our Utilities division. YTL Comms has obtained approval from the Malaysian Communications and Multimedia Commission



- 1 *The Colonial Brickwork structure and tunnel at YTL Comms' Network Operation Centre*
- 2 *Green features and trees planted within the YTL Comms Network Operations Centre*
- 3 *Tunnel during the day*
- 4 *Tunnel in the evening*
- 5 *Use of glazing, natural lighting and ventilation at the Centre*

(MCMC) to operate a 2.3 gigahertz (GHz) wireless broadband spectrum and has rolled out the Group's nationwide WiMAX (Worldwide Interoperability for Microwave Access) platform, Yes.

The YTL Communications Centre is located in Sentul Park, formerly known as Sentul Railway Workshop, a central workshop to serve the Federal Malaya State Railway (FMSR) during its heyday in the 1930s as one of Malaya's finest integrated engineering workshops. Today, although the dominance of rail transport has since diminished, the vestiges of this bygone era still remain part of the structure the centre sits in now.

At this new facility, it is a case of history repeating itself – the very latest in cutting-edge telecommunications technology being housed in the same building constructed to house what was, at the time, cutting-edge locomotive technology. The old structure is not only referred to but is respected in totality. The 6.1m high, 450mm thick English bond brickwork with protruding square pointing facades was retained with no adulteration. The expressive roof structure in steel is re-cladded with zincalume and insulated. The existing steel columns date back to 1898 and are embossed with stamps which read "Dorman Long & CL Middlesbrough England". Simplistically, the form and structural materials retained its integrity as originally intended. An additional floor was added, coalescing this existing sea of columns with reinforced steel columns.

### Design Significance

A stunning entry experience and the introduction of a *porte-cochère* (covered portico-like entrance cum drop-off area) was created by an excellent approach of using a 3m diameter circular HUME concrete pipe culvert clad in Merbau timber strips. If a conventional approach of a porch was used, the integrity of the original structure would have been compromised. However the pipe culvert provided a form sympathetic to the old structure and simultaneously to the technically advanced use of the building. This shape of a tunnel into the building and the play of its ceiling suggest a futuristic approach.

With a new programme, the void within the original workshop structure was ingeniously inverted, giving a new meaning to the original box envelope. From the outside, what appears to

be a solid brickwork box structure was carved internally with a courtyard landscaped with matured trees. Entering through the tunnel, the courtyard is contrasted as a delightful explosion of light and space.

### Sustainable Construction Materials and Methods

The introduction of new materials and forms stay true to its time, retaining their modernity, but the application and composition is always orchestrated purposefully to always throw a hinted reference to the old building elements. The external form is the rehabilitated warehouse and the only introduced form is the entry tunnel. Internally, the existing structure was an open workshop and here, new walls have been introduced with carefully calculated construction build-ups to suit the functions of the new program. The honesty of materials is the main design philosophy where natural beauty is being exhibited through the innovative use of basic material such as sawn 'clinker' brick for flooring in the courtyard with exposed pixilated grains and texture. The organic character of these materials responds to the variable light conditions and takes new hues and characters as it ages in time.

The colonial brickwork structure was retained to preserve the building's fabric and the entire external facade was retained with no adulteration. The steel structure was fireproofed, whilst the existing brickwork was repaired and cleaned. The excellent quality of the original brickwork and workmanship meant that no artificial coatings were required. With the exception of the roof, which needed to be replaced and insulated, the form of the building was retained in totality, including all the existing purlins and steel trusses.

For most developers in Kuala Lumpur, the arduous but more environmentally-friendly task of building restoration and adaptive reuse is avoided in favour of demolition and reconstruction to satiate appetites for the gleaming and new, unless coerced otherwise by local guidelines and regulations. Clearly, YTL Comms departed from this conventional mode of thinking by housing its new NOC in the former Sentul Works railway workshop that dates back to 1906. As a testament to YTL's innovation in adaptive reuse, in July 2011, the YTL Communications Centre won the PAM (Malaysian Institute of Architects) "Gold Award" for "Adaptive Re-Use".

*d7 @ Sentul East**Architectural Rendering of d7 @ Sentul East*

d7 is a stunning piece of 7-storey architecture conceptualised to redefine traditional office spaces that are uniform and homogeneous in form and character. Completed in December 2010, the building features an iconic form – bold, simple and with a severe façade that is set to invigorate Sentul by infusing a new vibrancy into an area treasured for its rich historical background and business heritage. Featuring cutting-edge duplex sky offices and boutique offices with retail and F&B outlets encased in a lush landscaped courtyard atrium area, d7 was designed to create work space for organisations who wanted to differentiate themselves. The low-rise office building around an open-air courtyard allows a seamless integration between social and commercial.

d7 has already won both a “Silver Award” in the “Commercial Building” category at the 2011 PAM (Malaysian Institute of Architects) Awards and the Singapore Institute of Architects (SIA) Architectural Design Award 2011 with **Honourable Mention** in the “Commercial Office Building” category.

Notably, d7 is an ideal commercial location with its Jalan Sentul frontage, and excellent train and road connectivity set to make it a future business hub of Kuala Lumpur. Public transportation is also available with the new KTM Komuter station which is located 100 metres away from d7. The KTM station will be an advanced gateway to Sentul, offering unparalleled connectivity to established neighbourhoods such as Subang Jaya, Shah Alam and Klang, and even to KL International Airport (KLIA). Launched in 2011, d7 was a sell-out success amongst investors and buyers.

*d6 @ Sentul East**Architectural Rendering of d6 @ Sentul East*

The 80-unit d6 boutique offices are interlinked to d7 through a sky bridge that stretches over Jalan Sentul. Featuring cutting-edge duplex offices, boutique offices with retail and food and beverage outlets, lush landscaping, water features and artistic sculptures in the atrium area, d6 is built over RM100 million worth of freehold land. It offers buyers and investors three types of attractive layouts: Sky Offices, duplex units with features such as glass skylights and an internal courtyard; Garden Offices with a landscaped garden terrace in every unit; and Office Suites complete with their own pantry, store and column-free layout. d6 has achieved 90 per cent take-up, indicating its demand and success.

### Current and Future Projects Malaysia

*The Capers at Sentul East*

Already in demand for its quality homes, Sentul is also shaping itself as the city's next business hub featuring a new generation of architecturally-stunning offices that redefine the traditional office model. Located at Sentul East, the architectural marvel of The Capers comprise two iconic 36-storey towers, interrupted at random with sky gardens and flanked by low-rise suites, the definitive statement in green urban living.

The curvy design of the structure was inspired by nature, where nothing conforms to a straight line, such as, for example, branches, leaves and waves. The structure depicts wave-like sculptural forms that soar majestically into the sky. Space optimisation in the internal layout is also a notable plus point, together with good public transportation access. It is located within walking distance of the Sentul Timur LRT Station and the Sentul KTM Komuter where within 15 minutes one can connect directly from the KL Sentral Station to the KL International Airport via the KLIA Ekspres Train. In addition, three highways (Sentul Link, Duta-Segambut and DUKE which is accessible from the north of Sentul) ensure smooth connectivity to all parts of the city.

All 338 tower units of the freehold project, with a gross development value of RM350 million, have been snapped up by buyers and investors. The reasons for the huge demand include its strategic location, accessibility, pricing, the developer's reputation and credibility and its unique design. The strong demand came at a time when sentiment was weighed down by economic uncertainties in the Middle East and impacts of the devastating earthquake and tsunami that struck Japan on March 2011. Despite the odds, YTL Land's The Capers showed strong demand, indicating that the product stood for something to the public, with Malaysians continuing to believe in investing in real estate for the long term.



*Architectural Rendering: The two iconic towers @ The Capers*



*Architectural Rendering: A stunning panorama of KL's cityscape from a unit at The Capers*



*Architectural Rendering: Low-rise duplex maisonettes sitting between the two towers and fronting a water body*



*Architectural Rendering: The glass, steel and concrete facade of The Capers interrupted at random by Sky Gardens*

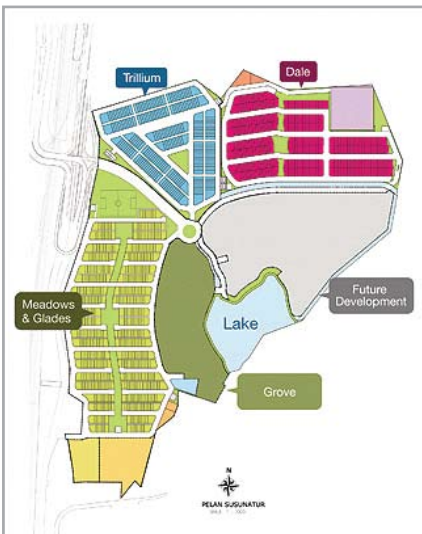
Price aside, a stand out feature of The Capers is its "out-of-the-box" design. Both towers – one oriented south towards KLCC and the other north facing the highlands – are positioned to shield the units from the afternoon sun and from each other so they do not look into each other.

### *d2 & d5 at Sentul East*

YTL Land will soon be launching two more commercial developments, d2 and d5, strengthening its goal to create an iconic business hub in Sentul, and infusing a new vibrancy into the area.

In future, all Sentul East developments will be connected by a sky bridge to provide accessibility and convenience to the community, and also creating a truly thriving and connected hot spot. The elevated sky bridge will provide seamless access from the Sentul KTM Komuter through the properties and to the Sentul Timur LRT Station. The first connection will be made between d6 and d7 in 2011.

### *Lake Fields at Sungai Besi*



*Master Plan and Map of Lake Fields at Sungai Besi*

Lake Fields at Sungai Besi is a good example of reclaiming and recycling land at strategic locales and turning them into places that showcase new standards of living for Kuala Lumpur. The project in the Sungai Besi area is being undertaken on a joint venture basis by YTL Land and Malaysia's Employees Provident Fund (EPF).



*Architectural rendering of triple-storey semi-detached homes at The Grove @ Lake Fields*

A Master Plan has been developed for the 184-acre community that celebrates the natural features and amenities of its immediate surroundings. It is envisioned that Lake Fields will embrace the ideals of urban living – large, spacious houses set against a pristine lake, lush landscaping, tree-lined streets, linear parks connecting pocket parks, canal greens and a water promenade. The linear park will serve as an educational and reflective zone with features like children's corners, which offer interactive equipment housed in roofless boxes. The pocket parks will be located throughout the development and is designed for meditation, wellness and relaxation.

Panoramic and landscaped streets combining flowing water elements and lush greenery make up the look and feel of Canal Greens while the water promenade will feature a grass pier and pontoon, and terraced seating at the edge of the lake. Pictured are the three landscape themes – Linear Park, Canal Greens and Pocket Parks – that set the balance between nature and development in Lake Fields.



*A resident park that serves as a melting pot and reflective zone is a key feature of Lake Fields.*



*Pretty landscaped streets dress the development through Canal Greens where the community of Lake Fields can choose to play or simply just relax.*



*Residents looking for a quick refuge can find solace at Pocket Parks found in various parts of Lake Fields*

## Singapore

### Sandy Island



*The Sandy Island Development at Sentosa Cove*

Located in Singapore's only marina community Sentosa Cove, Sandy Island is the maiden residential development in Singapore for YTL. Consisting of 18 waterfront villas, the collection is designed by Claudio Silvestrin, a world-renowned designer cum architect from Italy famous for his design of 26 Giorgio Armani flagship stores around the world. Winning two awards for the "Best Development" and "Best Development Marketing" at the CNBC Asia Pacific Residential Property Awards 2009, the collection is situated in the southern precinct of Sentosa Cove.



*Waterfront Villas at Sandy Island*

Silvestrin envisioned the island development as a private sanctuary in a tropical island with 18 villas hidden within its rainforest. To achieve this ambitious rainforest concept, YTL with the support of Sentosa Development Corporation has saved over 18 Khayak trees which were due to be felled to make way for major developments in Sentosa Island in 2008. Each tree is over 25 years old and they have been transplanted from their original sites and grown in a nursery for over two years, before they will finally be transplanted on Sandy Island when the construction is completed.





*A driveway with canopy at Sandy Island*

With their dense canopy, the mature trees will shelter the driveway and gardens of the villas, not only enhancing the overall living environment with lush greenery but also giving more privacy to the development. The residents of Sandy Island will truly own and enjoy a piece of Sentosa's botanical heritage at their doorsteps. This transplanting exercise is a first-ever by any developer in Sentosa Cove and it has set Sandy Island apart from any other developments in this prestigious gated community for Singaporeans and foreigners.

### *Kasara the Lake*



*Villas overlooking the lake*



*Front Façade of a villa at Kasara The Lake*

As the second residential development launched by YTL in Singapore, Kasara the Lake is a collection of 13 lakefront villas in the northern precinct of Sentosa Cove, Singapore's only marina community. Designed to optimise its location abutting the Serapong Lake with unobstructed views of the Serapong Golf Course, these villas have green design features which promote tropical resort living and embrace the natural environment.

The development is conceptualised to be a row of lakehouses sited amongst layers of black bamboo while the gardens facing the lake are surrounded by Eucalyptus trees. These trees serve to separate the villas as green walls, complementing the tropical architecture. Living spaces are designed as separate pavilions linked by walkways and double volume corridors in a mosaic layout to emulate living spaces in traditional tropical houses of Bali and Thailand. With full height doors opening up living spaces to the outdoors, the design provides extensive cross ventilation to cool the interior spaces, allowing residents to enjoy the natural breezy conditions of the site and reducing the need for air-conditioning.

Outdoor courtyards and water features sheltered by tree canopies link internal spaces with the outdoors seamlessly, encouraging residents to enjoy the outdoors as an extension of the interiors. Vertical screens towering two floors are a key design feature which act as privacy veils as well as sun shading screens, allowing residents to fully open their glass windows behind the screens to ventilate the interior spaces.



*Courtyard at one of the Units at Kasara The Lake*



Kasara the Lake is awarded the “Green Mark Certification” by the Building Control Authority in Singapore.

To learn more about our award-winning sustainable developments and future developments by YTL Land & Development Berhad, please visit the following websites:

- [www.ytland.com](http://www.ytland.com)
- [www.centrio.com.my](http://www.centrio.com.my)
- [www.lakeedge.com.my](http://www.lakeedge.com.my)
- [www.lakefields.com.my](http://www.lakefields.com.my)
- [www.maple.com.my](http://www.maple.com.my)
- [www.d7.com.my/sentuleast.asp](http://www.d7.com.my/sentuleast.asp)
- [www.d6.com.my/sentuleast.asp](http://www.d6.com.my/sentuleast.asp)
- [www.capers.com.my](http://www.capers.com.my)
- [www.propertynetasia.com.my / NewDevelopment/d2](http://www.propertynetasia.com.my/NewDevelopment/d2)
- [www.propertynetasia.com.my / NewDevelopment/d5](http://www.propertynetasia.com.my/NewDevelopment/d5)
- [www.propertynetasia.com.my / NewDevelopment/sentulraya](http://www.propertynetasia.com.my/NewDevelopment/sentulraya)
- [www.klpac.com](http://www.klpac.com)
- [www.sandyisland.com.sg](http://www.sandyisland.com.sg)
- [www.kasara.com.sg](http://www.kasara.com.sg)

### Commercial Properties in Malaysia

The YTL Group’s commercial properties have also been actively involved in making a difference on a more retail-oriented scale, with properties such as Starhill Gallery and Lot 10 in Kuala Lumpur and Wisma Atria in Singapore participating in global events such as *Earth Hour 2010*, as well as the Group’s own initiatives such as *Climate Change Week*. Further details of these events can be found in the section entitled “Programmes and Collaborations” in this report.

### Starhill Global Reit

Starhill Global REIT is a Singapore-based real estate investment trust investing primarily in real estate used for retail and office purposes, both in Singapore and overseas. Since its listing on the Main Board of the Singapore Exchange Securities Trading Limited on 20 September 2005, Starhill Global REIT has grown its initial portfolio from interests in two landmark properties on Orchard Road in Singapore to 13 properties in Singapore, Malaysia, China, Australia and Japan, valued at about S\$2.7 billion.

These include interests in Wisma Atria and Ngee Ann City on Orchard Road in Singapore, Starhill Gallery and Lot 10 in Kuala Lumpur, Malaysia, full ownership of a premier retail property in Chengdu, China, seven properties in the prime areas of Tokyo, Japan and the David Jones Building in Perth, Australia. Starhill Global REIT remains focused on sourcing attractive property assets in Singapore and overseas, while driving organic growth from its existing portfolio, through proactive leasing efforts and creative asset enhancements.

Starhill Global REIT is managed by an external manager, YTL Starhill Global REIT Management Limited. The Manager is a wholly-owned subsidiary of YTL Starhill Global REIT Management Holdings Pte Ltd which is in turn an indirect subsidiary of YTL Corporation Berhad.

In the past, YTL has been responsible for transforming the city landscape of Kuala Lumpur, 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, increasing energy efficiency.

YTL’s Environmental Division is also researching air-conditioning and 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. Some of Starhill Global REIT’s projects and properties which involve sustainability practices include the following:

## Malaysia

### Starhill Gallery



*Image courtesy of Sparch*

### *Sustainable Design*

In August 2011, YTL Corporation, in keeping with the completion of the recent Asset Development Exercise by Starhill Global REIT, launched a re-designed Starhill Gallery, its iconic shopping mall in KL featuring an extensive array of luxury shops and fine-dining restaurants. The revitalised mall is an affirmation of Starhill Gallery's position as the definitive destination for discerning shoppers in Southeast Asia. Designed by award-winning architectural firm Sparch, the new Starhill Gallery has reinvented its façade facing Bukit Bintang, visually attracting patrons and taking advantage of the heavy footfall along the section of Bukit Bintang, KL.

### *Sustainable Design Considerations*

Sparch's re-imagining of the Starhill Gallery is first of its kind in Malaysia. It used lightweight steel and glass façades made from state-of-the-art glass technology crafted by professional engineers, who are famous for designing the Pyramid at Paris Louvre. The building has an uninterrupted front design encasing the entire building with a crystalline skin of glass and stone plates to resemble the "wet drapery" of ancient Greek and Roman statues. This gives the tenants' brand and merchandise a unique look bound to attract shoppers.

Key factors in the construction, especially remodelling, of the retail project included the speed of construction and minimisation of disruption to the operation of the building and the public realm. This demonstrates why a lot of prefabrication was employed in the design. Specialist engineers devised the most lightweight building framing possible which reduced the overall steel tonnage by approximately 25% as compared to a conventional façade, dramatically reducing the embodied energy in the building.

Glazed areas were also minimised to the occupied parts of the building to increase the building mass while decreasing solar gain. As a consequence, energy consumption is reduced. In addition, over 90% of the materials used in the construction of the building shell are recyclable. Furthermore, the building external surfaces use a self-cleaning coating system where Nano Self Cleaning Solutions (NanoSCS) reduce the need for traditional cleaning and maintenance as bacteria and any organic or inorganic pollutants

on the walls are decomposed when exposed to the ultraviolet (UV) rays. The coating not only helps to reduce cleaning costs – it also helps to protect the environment by eliminating the use of harmful detergents and conserving water usage for cleaning to obtain better efficiency.

### *Educating Tenants and Shoppers on the importance of Environmental Conservation*

In 2010, Starhill Gallery teamed up with YTL's environmental beneficiaries, Reef Check Malaysia, to roll out a programme through phasing out plastic bottles and instead, replacing them with Evian mineral water bottles in its F&B outlets at Feast Village, Starhill Gallery. In partnership with Evian, 5% of the proceeds derived from the sales of the water bottles were donated to Reef Check Malaysia.



*Evian Water Bottles with the "Conservation Sticker" at Starhill Gallery*

Visit [www.starhillgallery.com](http://www.starhillgallery.com) for more information on Starhill Gallery.

### *Lot 10 Rooftop – A Forest in the City*



*Lot 10's 'Forest in the City' rooftop*

Lot 10, the iconic green building owned and managed by YTL 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. 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 opened its doors to the public in October 2009. It now houses a fitness club, a dance club, a restaurant and The Actors Studio set amidst lush greenery of overhanging ferns and emerging foliage and a variety of tropical plants. The Rooftop Fitness Club also 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.

### Educating Tenants and Shoppers on the importance of Environmental Conservation

In 2011, Lot 10, Jendela KL and Debenhams teamed up to create and showcase a *Spring/Summer 2011: Fashionably Sustainable Collection* featuring sustainable materials. 20% of proceeds from the sales were channelled to YTL’s environmental beneficiary, Reef Check Malaysia.

Visit [www.lot10.com.my](http://www.lot10.com.my) for more information on Lot 10.

### Singapore

#### Wisma Atria

Existing Sustainability initiatives at Wisma Atria, one of Singapore’s oldest iconic malls, include the following:

#### Recycling

- For both the retail and office podiums, general paper waste is collected separately from general waste by appointed cleaning vendors and sent for recycling.

- One of the mall’s anchor tenants, Food Republic, has kitchen exhaust systems with Halton UV Captured hood systems which remove most oil/grease before discharging into the atmosphere. Individual F&B tenants handle their own used cooking oil collection which is collected by their appointed vendor for recycling purposes.
- Food & Beverage tenants Food Republic and Coffee Stars by Dao also deploy Halton Capture Ray UV Hood systems in their kitchen which have high efficiency filters to remove grease and oil odour before discharging into the atmosphere. At the same time, the Halton Hood system allows for more efficient use of space with its smaller duct size requirements.
- Food waste was separately collected from normal waste previously. The mall had 100% F&B tenants on board in this programme though the food waste vendor terminated this service on 23 February 2011.
- Local recycled water, Newater, is used for the air-conditioning cooling tower system and the fire sprinkler system. The use of Newater is about 40% of the total domestic water consumption for general services.
- Waterless urinals employing environmentally friendly organic pellets are used in male washrooms. This reduces the use of water, electricity and maintenance as there is no flushing.
- Energy saving LED lighting is used in the urinal areas.
- Future Planned initiatives are subject to mainly MCST 1471 M&E equipment upgrading/replacement exercises.

### Educational Events on the Environment

- **Fashion Reglammed!, 26 March to 8 May 2011**

In an effort to “reinvent, recycle, reintroduce, renew, reassess” and drive sustainability and eco-conscious design strategies, it is important to take stock of materials, resources, and creative ingenuity. What better way to marry the Fashion Season and Earth Hour than to have a Fashion Design Project centred around the theme of recycling and reinvention? In

conjunction with *Fashion Season @ Orchard 2011* and the inaugural *Earth Hour @ Orchard 2011* in Singapore, Wisma Atria collaborated with fashion labels Dorothy Perkins, Miss Selfridge and Raffles Design Institute for a fashion design competition where students were put to the test to reinvent an existing garment to become a new fashion statement. The inventory of garments were kindly contributed from Dorothy Perkins and Miss Selfridge's past season collections.

The fashion design competition required students to work in small groups to "think out of the box," manipulate fabrics and apply their skills in tailoring to create new and completely different garments from the donated garments, and inspiring them to innovate and create. A total of 20 entries were submitted from the students and the best 10 were shortlisted for final judging and public voting. The event garnered media attention and publicity in local newspapers and online platforms as well as more than 1,000 public votes.

- **A Decade of Biodiversity and Discoveries Exhibition, 9 to 25 May 2011**

Beyond landscapes and greenery, it is important for the community to be involved and to be a part of the effort to make Singapore a City in a Garden. With urbanisation, the community has increasingly lost touch with the greenery that surrounds us. This could lead to human and biodiversity tensions in the long term.

Recognising that Singapore cannot be a true City in a Garden without the community, the National Parks Board (NParks) and its registered Charity and IPC, Garden City Fund (GCF) collaborated with Wisma Atria to educate the public on the rich biodiversity of our local flora and fauna through an environmental-themed exhibition on the importance of conservation.

## China

### *Renhe Spring Zongbei*

Existing Sustainability initiatives at this mall include the following:

- For climate conservation, indoor temperature at this shopping mall is being maintained at 25 degrees Celsius to help increase energy efficiency during summer months.
- Paper shopping bags have replaced plastic ones as a more environmental-friendly alternative.
- Print consumption is reduced and efforts to recycle are made. For example, employees print documents on double sides or recycled papers whilst working at the office in the building.

## Japan

### *Roppongi Terzo*

Roppongi Terzo, located in the popular Roppongi area (Minato Ward) in Tokyo, is a shopping mall which targets middle income shoppers. The mall features a green feature wall on its façade which helps reduce heat absorption or heat loss.



## HOTELS & RESORTS

### YTL Hotels



*Ritz-Carlton, Kuala Lumpur – the city's first full-butler award-winning hotel*



*Tanjong Jara Resort, located on the East Coast of Peninsular Malaysia, is a sanctuary of luxury and well-being steeped in age-old Malay traditions*



*Hilton Niseko Village – ski resort accommodation in Niseko, Hokkaido, Japan*



*Pangkor Laut Resort, Malaysia is located on a private island preserved in pristine condition*

### Green Meetings

YTL Hotels' has a spectacular collection of Hotels and Resorts worldwide. At Pangkor Laut Resort and at 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.

The Ritz-Carlton Green Meetings' 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; and
- Utilise meeting by-products to broaden local Community Footprints outreach.

All Ritz-Carlton Hotels worldwide also have a "Community Footprints Programme" which allows guests staying at its Hotels to participate in social or environmental projects alongside employees of The Ritz-Carlton through their 'voluntourism' programme, "Give Back Getaways®". Through the Programme, it is anticipated that Guests develop a greater appreciation and respect for nature.

At Pangkor Laut Resort, an Environment Committee has been set up. The Committee holds Green Meetings quarterly, in which current sustainable practices and future improvement are discussed and achievable environmental goals are set.

### Energy-Saving and Sustainable Practices

At our hotels and resorts, a wide range of energy-saving practices have been employed to reduce the Group's overall carbon footprint. Initiatives include the following:

- Electrical appliances (for example, lights and air-conditioning) switched off whenever possible. This is practiced by all staff at all times;
  - Water outlets are not left running, leakages are always monitored, and plumbing issues are repaired where needed to reduce wastage. Leakage detectors have been installed to help identify underground water pipe leaks;
  - Equipment has been upgraded to reduce carbon emissions. For example, Pangkor Laut Resort upgraded their marine equipment from 2-stroke outboard motors to 4-stroke, which produces less carbon emissions;
  - Rainwater harvesting practices are employed at all hotels and resorts;
  - All hotels have been retrofitted to improve energy efficiency and sustainability (for example, motions sensors have been installed in public spaces so that lights are switched on only when needed); and
  - A combination of replacing light bulbs with a lower wattage, incandescent and halogen bulbs to ones previously used and the installation of heat exchange equipment to generate hot water from waste chiller heat (with chiller scheduling to run on minimum demand) has reduced energy consumption by 10% each year from 2008.
- and recycle' policy has also been adopted for all its hotels and resorts. This involves educating all hotel staff on the importance of conservation, using environmentally-friendly products, and employing sustainable practices in hotel operations.
- Plastic bags and laundry bags are re-used where possible, waste material and rubbish is managed properly, and all maintenance and building material is recycled and/or donated for other use (For example, waste wood and building material is not burned but instead reused, donated, or resold where possible to locals or recycling facilities);
  - Guests are given the option to reduce water wastage and detergent release by having their towels and bed linens replaced every other day instead of every day;
  - Shower gels from guest rooms are recycled for staff use at the canteen for washing hands;
  - Plastic laundry bags have been replaced with a reusable version at most of our resorts;
  - Non-harmful, biodegradable chemicals and detergents from an environmentally-friendly company are used;
  - Eco solutions are employed wherever possible (For example, dried coconut husks are used to help prevent hillside soil erosion due to heavy downpour);
  - JW Marriott Hotel in Kuala Lumpur offers guests a choice of holding sustainable meetings and events – through not serving bottled water, straws, or coasters, and serving a menu comprised of locally-sourced cuisine; and
  - Pangkor Laut Resort and Tanjong Jara Resort have stopped serving bottled water at all food and beverage outlets – in instances where bottled water is used, the bottles are sold to recycling plants.

In keeping with the Group's sustainability practices throughout its other divisions, a 'reuse, reduce,

Visit [www.ytlhotels.com](http://www.ytlhotels.com) for more information on YTL Hotels.



## CARBON CREDIT CONSULTANCY SERVICES

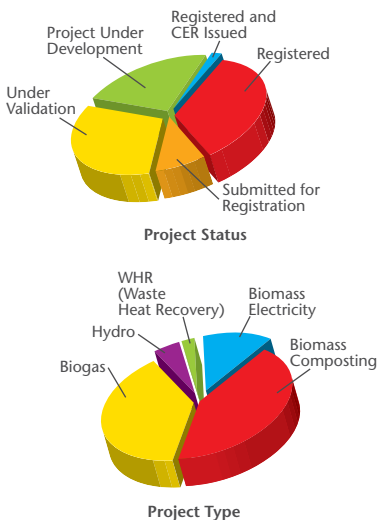
### YTL-SV Carbon

In May 2008, the Group announced its acquisition of Malaysian-based Clean Development Mechanism (CDM) developer, SV Carbon, now known as YTL-SV Carbon Sdn Bhd (YTL-SVC). Since then, the company has grown into the largest CDM consultancy organisation in Malaysia and the fourth largest in ASEAN by number of registered projects.

By 2011, YTL-SVC had assisted in the registration of 18 *United Nations Framework Convention on Climate Change* (UNFCCC) CDM projects and a further 55 in the pipeline at various stages of validation and registration under both the CDM and Voluntary Carbon Standard (VCS) Boards. It had the first issuance of Carbon Emission Reductions (CERs) made by the UNFCCC to one of its clients in 2Q 2011.

YTL-SVC was also recently awarded the Award for **“Best Carbon Markets Brokerages, Asia”** at the World Finance Carbon Market Awards 2011 and is an affiliate member of the *Roundtable for Sustainable Palm Oil (RSPO)*.

The following charts show the Project Status and Project Types YTL-SV Carbon is involved with:



The CDM was created as part of the Kyoto Protocol, and allows companies to turn environmental improvement into a cash flow through the creation and sales of a new commodity – Certified Emission Reductions or CERs. The CERs are generated by an approval process involving the Host Country Government (the government of the country where the emission reduction project is installed), Annex 1<sup>6</sup> Country (the government of the country which buys the carbon credit assets) and the United Nations (UN). CERs can be sold as commodities either on forward contracts or spot.

Buyers of CERs are governments and private sectors in industrialised countries. In 2007, more than US\$13 billion worth of CERs were traded internationally and we foresee that 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 four years, driven by companies' increased participation in environmentally sustainable projects.

The Malaysia Energy Centre estimates that the country has up to RM100 million tonnes of carbon credit potential for the 2006 to 2012 period and it could benefit from carbon trading, which is now worth US\$60 billion globally but could grow to US\$1 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-SVC provides tailor-made, end-to-end solutions for companies wishing to embark on carbon emissions reduction projects, 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. 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-SVC will work with its clients to maximise the value of their projects throughout the entire process.

<sup>6</sup> Annex 1 Countries – These are the 36 industrialised countries and economies in transition listed in Annex 1 of the UN Framework Convention on Climate Change (UNFCCC). It is the Annex 1 countries that can invest in CDM projects, and non-Annex 1 countries that can host CDM projects.



*YTL-SVC is an affiliate member of the Roundtable on Sustainable Palm Oil (RSPO), which promotes the growth and use of palm oil that is produced in a socially and environmentally sustainable way (Image courtesy of United Plantations)*

YTL-SVC has strong exposure to CDM and VCS projects in the palm oil sector such as methane avoidance, methane recovery, and methane recovery and renewable energy projects, working with plantation companies to develop clean energy from waste biomass derived from the decomposition of empty fruit bunches, with palm oil sector-driven projects making up at least 80% of the company's registered and pipeline projects. In addition to the palm oil sector, YTL-SVC also handles projects in waste heat recovery, energy efficiency, fuel switching, hydro power, landfill gas, geothermal power, waste to energy, and other renewable energy sources.

The geographical spread of YTL-SVC projects is quite extensive, with projects in many non-Annex 1 Asian countries such as Malaysia, Indonesia, China, Vietnam, Sri Lanka and Thailand. The client profile of YTL-SVC covers a diverse spectrum of organisations from government-linked companies, private companies, public listed companies, and state-owned enterprises. Furthermore, the company works with NGOs, government bodies, and all stakeholders to facilitate the ethical deployment and implementation of the projects.

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

## BIODIVERSITY & NATURE CONSERVATION

### Power Generation & Transmission

#### MALAYSIA

- **Paka and Pasir Gudang Power Stations, 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, ensuring the sustainability of marine life in these areas. Emissions of CO<sub>2</sub> and 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 DOE.

#### INDONESIA

- **Jawa Power & Jawa Timur, Indonesia**

At the Jawa Power plant in Indonesia, cooling water is extracted from and returned to the Java Sea. Jawa Power has consistently monitored its discharge water quality at all water discharge sources via an online system that is cross-checked monthly by accredited independent laboratory sampling. All parameters are managed within regulation limits, and any deviation from standards is addressed immediately for remedial action.

- **Seawater Condition**

In addition to online monitoring, a sea water biota survey that studies plankton, zoo plankton, macro zoo benthos, coral reef, and sedimentation rates is performed every three months as part of the Environmental Monitoring Plan under

Indonesia's Environmental Impact Assessment (AMDAL). After the Plant's 12 years in operation, aquatic life continues to thrive in the ocean and marine ecosystem around the power station. Jawa Power's staff also double up as volunteer divers to regularly survey the health and state of the reefs, in support of these sustainability programmes.



*Photo taken by Staff Volunteer Diver showing soft corals and clown fish species at a location at the Plant's Monitoring Point No. 2*



*Photo of a Monitoring Point (Point No. 4)*



*A Staff Volunteer Diver inspecting the state of the Reef and Corals near the plant*

- **Fixed Dome Anaerobic Bio-digester**



*Fixed Dome Anaerobic Bio-digester at PT YTL Jawa Timur's TK- 4 Station*

As a continuation of its previous pilot-scale program, a biogas facility for local cow farmers near the power station has been set up and is now in operation. The facility is designed to digest waste manure from 16 cows and to generate biogas for eight houses. The biogas produced will replace the use of wood and kerosene for cooking activities, which will benefit the environment by curbing methane (a greenhouse gas which has a global warming impact 21 times that of carbon dioxide) emissions to the atmosphere.

Based on statistical data, many of the local communities in the Paiton station are supported by cow-farming activities. Jawa Power aims to enhance this initiative by planning to build more facilities of this sort in the future, so that the local community can gain tangible benefits from these projects while gaining a better awareness of waste utilisation around their locale.

- Plantation Programme

The Plant's Plantation Programme was introduced in joint partnership with a local environmental authority to encourage the planting of more trees and greenery in communities living near the plant. Since 2010, around 9,000 trees have been planted and this figure is expected to increase in the future.



*Plantation at Ranu Segaran, April 2010 – 4,000 trees planted*



*Mangrove Plantation, November 2010 – 5,000 mangrove seeds planted*

Planting mangroves and reforestation has become the focus of this widely-accepted programme. Planting of mangroves scientifically improves the water quality on locations with mangroves being capable of absorbing organic pollutants while helping in the stabilisation and prevention of soil erosion. The company contributes trees and soil fertiliser, while the local authority provides forestry areas that need to be planted. It is an excellent example of communities working together for the benefit of the Environment and Humanity.

- Green Campaign

In 2011, Jawa Power conducted its fifth yearly *Green Campaign Programme*. The campaign was timed in conjunction with World Environmental Day on 5 June 2011, and carried out over a three-month period. It was designed to increase awareness and participation of staff and their families with respect to environmental protection. The activities carried out during the programme included a waste management campaign, paper usage reduction campaign, and an electricity and water saving campaign in the Plant's Operation Housing Complex.

In 2009, the Green Campaign involved schools in Indonesia's Probolinggo regency raising awareness on environmental care among students, through a Waste Management Competition held among schools. Rewards were given in the form of school facility improvements for schools who demonstrated good improvements on waste management systems.

The following Chart shows the plant's 'paper trail' with paper consumption decreasing, indicating that the company's Conservation Programmes are working.



*Composting of organic wastes*

- Earth Hour 2011



During Earth Hour 2011, staff and their families at the plant's Operation Housing Complex participated in this yearly event to encourage energy saving. Lights were switched off for 60+ minutes in keeping with this year's theme to "go beyond the hour" to support the global movement to prevent Global Warming.

## SINGAPORE

### PowerSeraya

#### International Coastal Cleanup

On 18 September 2010, PowerSeraya's Sustainability Manager led a group of 15 student volunteers from Singapore Polytechnic Environmental Club to participate in the annual International Coastal Cleanup (ICC).



*Students from the Singapore Polytechnic Environmental Club at the annual International Coastal Cleanup (ICC)*

Held on the third week of September every year, the ICC is the world's largest volunteering effort which sees about 400,000 volunteers participating

in this worldwide activity to 'clean' the ocean each year of everyday litter. This is the third year that PowerSeraya has collaborated with the Singapore Polytechnic Environmental Club. The clean-up operations, conducted along a 400-metre beach stretch along Singapore's Pasir Ris Park, resulted in 18 kilograms of debris items collected. Every debris item collected was recorded on a data sheet by the volunteers. Each year, the data is collated by the Raffles Museum of Biodiversity Research for Singapore and sent to the Ocean Conservancy for compilation at an international level and subsequently submitted to the United Nations Environment Programme.

## Water and Sewerage Services

### Bath, United Kingdom

#### Wessex Water

YTL's subsidiary, Wessex Water, is located in an environmentally-sensitive region that influences how it maintains and develops its assets. 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 Wessex Water's landholdings. 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; and
- site environment plans illustrating extensive management requirements.

As part of its wider commitment to improve environmental quality, Wessex Water has a responsibility to conserve and, where possible, enhance biodiversity in its land holding. The company is achieving this by focusing on how it manages its existing sites for conservation and by checking and monitoring engineering works to avoid damage to the environment during new developments.

Wessex Water has a total of 50 sites where it has introduced specialist conservation management techniques. Each site has a specific management plan, detailing the special wildlife interest and relevant management measures and a gate sign to inform staff and visitors of the work. The management plans range from simple grass cutting arrangements to special access measures to prevent disturbing bat roosts.

The company has exceeded the national target for Sites of Special Scientific Interest (SSSI) on their landholding, with 96% of these sites achieving the favourable or unfavourable-recovering status since April 2010. This has involved working with Natural England, their tenants, and directly managing their SSSI designated operational sites.

#### Working for Wildlife

Last year saw the launch of Wessex Water's new five-year project to support wildlife on some of their best sites. This work focuses on two key habitats and the associated species:

- Grasslands for invertebrates (including butterflies, bees and other insects)
- Woods and fields for birds and bats

In 2010 – 2011, the company started surveys to identify the species at its sites, their numbers, and the way they used their land. This will help to focus future land management to maintain and encourage wildlife at appropriate locations.

#### Working in Partnership

Through its *Biodiversity Partners* Programme, the company funds water-related conservation work to enhance biodiversity elsewhere in their region. Each year, GBP£70,000 is divided among seven projects focusing on partnership working, science

and research, and specific biodiversity benefits that support their core business. Projects currently being funded include:

- River restoration and management of the chalk streams of the Hampshire Avon and its tributaries;
- An investigation of the links between land management and river water quality in the River Parrett, St Catherine's Valley and Hampshire Avon catchments and identifying sustainable practices that could improve water quality and biodiversity;
- Creation of 'climate corridors' to enable wildlife to move more freely, while restoring ecosystems and natural processes in the Brue Catchment; and
- Continued support for the establishment of tree sparrow populations across the Wessex region.

The Partners Programme provides further benefits to all parties involved by developing best practices, sharing data and information, and helping to meet the EU Water Framework Directive's long term goals of good water quality and ecological status. The company has also agreed to fund seven new or continuing projects during Phase 4 of the Programme running from April 2010 to 2015. It has chosen projects which will contribute to the overall aim of conserving and enhancing species and habitats, but which also:

- have specific benefits for biodiversity aligned with Wessex Water's core business activities (for example sewage treatment and water supply);
- build active and successful partnerships to benefit biodiversity across the region; and
- undertake detailed scientific research, training or monitoring to enhance its understanding of biodiversity.



The projects that Wessex Water is supporting during Phase 4 include the following:

Project	Aims	Specific focus – species/habitats
<b>Dorset Wild Rivers (Dorset Biodiversity Partnership)</b>	Deliver river and wetland habitat restoration in the Dorset Frome Valley, Piddle Valley and Stour Tributaries.	Mainly chalk rivers – grazing marsh, fen, reedbed, species rich grassland and wet woodland. Species include Bechstein’s bat, wading birds, salmon, eel, brown trout, white clawed crayfish, Southern damselfly, dragonfly and some stone fly species.
<b>South Wiltshire Farmland Bird Project (led by Cranborne Chase &amp; West Wiltshire Downs Area of Outstanding Natural Beauty)</b>	Reverse decline in farmland bird populations across South Wiltshire by working with farmers and tackling and diffusing pollution and water quality issues as part of the South West Farmland Bird Initiative.	The “arable six” – Lapwing, Grey Partridge, Turtle Dove, Yellow Wagtail, Tree Sparrow, Corn Bunting. Arable plants & field margins; chalk grassland and streams & hedgerows.
<b>Biodiversity Action in Somerset (Somerset Biodiversity Partnership)</b>	Promote and facilitate implementation of the Somerset Biodiversity Strategy and LBAP.	Somerset priority habitats and species including (for example): traditional orchards, ditches and ponds; water and wetland; woodland Otter, Bats, Lapwing, Long Eared Owl.
<b>Wessex Chalk Streams Project (Wessex Chalk Streams Partnership)</b>	River restoration and work with other stakeholders to reconcile the links between the public, water usage and rivers.	Chalk Rivers – Water vole, white-clawed crayfish, salmon, brown trout, brook lamprey, river water crowfoot, starworts, watercress and lesser water-parsnip.
<b>Wessex BAP Science Initiative (Ecological Research and Training)</b>	Facilitate joint BAP and science activity between the regions university’s and Local BAP partners.	Provide all LBAP partners with free access to inventory of BAP relevant research and monitoring skills at universities and institutes in Wessex, free access to training courses and web-based training material.
<b>Floodplain &amp; Catchment Woodland (Somerset Farming &amp; Wildlife Advisory Group)</b>	Increasing woodland cover in key locations to reduce run-off and soil erosion and to attenuate flood flows in parts of the floodplain.	Otter and semi-natural woodland.
<b>Invertebrates, Springs &amp; Seepages (Buglife)</b>	Conduct research on springs and seepages, and small habitats which link groundwater, surface water and terrestrial habitats that are often overlooked and under-researched. The project will identify key sites, identify the species using them and create management guidance.	Cliff tiger beetle, Southern Damselfly, Bog hoverfly, Southern yellow splinter, South-western groundwater shrimp, Rock face beetle and Geyers Whorl Snail.

Throughout 2010 – 2011, it has made significant progress towards its aim of enhancing the environmental integrity and biodiversity of the region. Additional highlights include:

- Receiving an outstanding contribution award at the Wiltshire *Wildlife Trust Corporate Green Awards* for making the greatest positive impact on the environment in Wiltshire over a sustained period;
- Collecting a *Green Apple Award* in 2010 for the work of its Partners Programme to benefit wildlife across the region;
- Collecting two *Green Apple Awards* in 2011 for its catchment management and waste reduction programmes along with its recycling projects;
- Their construction division retaining accreditation with the ISO 14001 standard for environmental management; and
- Production of a new internet based wildlife calendar, highlighting when and where to see wildlife in their region and on their sites.



*Wild Watch Newsletter*



Wessex Water’s “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

*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*

More information on these Programmes is available at: [www.wessexwater.co.uk/environment/threecol.aspx?id=5456](http://www.wessexwater.co.uk/environment/threecol.aspx?id=5456).



## Hotel Development And Management

### YTL Hotels

The importance of preserving the natural environment has been key to the design of our hotels and resorts, particularly at our Pangkor Laut, Tanjong Jara, and Cameron Highlands resorts. The rainforest that covers much of Pangkor Laut Resort's island is millions of years old and is faithfully protected. The draw card of Pangkor Laut has always been its natural beauty, a fact that has never been lost to our planners. At all three 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.



*Jungle trekking and guided rainforest tours at Pangkor Laut Resort, Malaysia*

Visitors to the resorts are encouraged to participate in guided tours to experience the local surroundings and natural environment first-hand. Each resort offers jungle treks with the resident naturalist to explore the richness of the local flora and fauna. Pangkor Laut Resort's jungle treks provide 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 includes crab-eating macaque monkeys, tropical monitor lizards, and yellow pied hornbills. The Majestic Malacca offers historical walks providing an insight into local culture, values, and heritage while Cameron Highlands Resort's focus is on the highlands and its richness of biological diversity.

This commitment to the natural environment has also been carried through to the new hotel additions to the Group during the past year. These included Niseko Village in Hokkaido, Japan, Muse, Hôtel de Luxe in St. Tropez in the south of France and the Swatch Art Peace Hotel in Shanghai, China.



*An ecological garden at Muse, Hôtel de Luxe in St. Tropez, France, designed by acclaimed landscape architect Sophie Agata Ambrise*



*Natural wildlife at Niseko Village, Japan*

- **SaveWildTigers.org Event in London, United Kingdom**

On 3 March 2011, YTL Hotels supported the *SaveWildTigers.org* event hosted by The Clinton Partnership in London by donating a gift of a week's stay at The Estates at Pangkor Laut Resort, which was auctioned off, helping to raise a total of around GBP£100,000 during *The Tiger Gala Dinner*, where celebrities, conservation leaders and campaigners attended an exclusive Gala Night in London to raise funds for this critically endangered species.

Held at the prestigious Mandarin Oriental Hotel, the event was the first major fundraiser for Save Wild Tigers, a partnership comprising the Born Free Foundation, the Environmental Investigation Agency (EIA) and Wild Aid. The event was created and promoted by The Clinton Partnership, which donated all its services.

Save Wild Tigers was formed in the aftermath of the St Petersburg International Tiger Forum convened by Russian Prime Minister Vladimir Putin in November 2010. With funding sources under pressure, Born Free, EIA and WildAid saw the value in pooling their resources to generate funds collectively to help ensure the Forum's words were turned into action. The monies raised by the Tiger Gala will be used for a variety of different and complementary tiger conservation activities.



*Actress Joanna Lumley hosting The Tiger Gala Dinner Event*



*Auctioneer Nicholas Parsons*



*Joanna Lumley and Dato' Jimmy Choo, OBE*



*Virginia McKenna and Will Travers, Chief Executive Officer of the Born Free Foundation*



- Pure Activities in Nature at Niseko Village, Japan



*Tree Trekking is just one of many exhilarating PURE Activities that visitors can experience at Niseko Village*

Encompassing both The Hilton Niseko Village and Green Leaf Hotel, Niseko Village offers a year round chic resort lifestyle – “Ski-in, ski-out” during the winter and golf, horseback riding, water rafting and canoeing all summer long. *PURE Activities in Nature (PURE)* at Niseko Village is a concept designed to deliver memorable experiences including hot air balloon rides, tennis, horseback riding, nature walks, tree-trekking and other activities inspiring healthy, active living and encouraging family bonding.

Please visit [www.niseko-village.com/en](http://www.niseko-village.com/en) for more information on these activities.

- Conserving Heritage Buildings



*Swatch Art Peace Hotel in Shanghai, China*



*The Majestic Malacca in Malaysia*

Both our Swatch Art Peace Hotel in Shanghai and The Majestic Malacca in Malaysia have historical significance and have been restored to their former glory in conservation projects to preserve architectural integrity and history.

Please see [www.swatch-art-peace-hotel.com/en/home](http://www.swatch-art-peace-hotel.com/en/home) and [www.majesticmalacca.com](http://www.majesticmalacca.com) for more details.

- Reef and Beach Clean-up, Malaysia

Reefs are home to thousands of marine life, including fish, which is an important food source for millions of people. They also support people's livelihood in activities such as fishing and tourism. The threat to reefs is particularly apparent in Southeast Asia, regarded as the global epicentre of marine diversity. Almost half of some 800 reef-building coral species inhabit Malaysian waters.

Tanjong Jara Resort, located on Peninsular Malaysia's east coast, is home to one of the country's best-kept diving secrets – Tenggol Island. Renowned as one of Malaysia's most beautiful and serene islands in the South China Sea, the untouched island provides access to some of the finest diving and snorkelling sites in the world. Underwater wildlife, often only found in these waters, are abundant and include whale sharks, turtles, barracudas and the infamous nudibranchs.

The deep waters of the Terengganu Marine Park come to life, offering a perfect window into untouched coral gardens and rare species of marine life. With over 20 stunning dive sites surrounding the main island of Tenggol Island, the protected area provides both an unforgettable introduction for beginners and a wealth of underwater adventures for experienced divers.

Hence, at YTL, we continue to do our part as corporate and global citizens to protect our natural marine ecosystems and oceans, together with the help of our environmental beneficiaries, Reef Check Malaysia. YTL has been a sponsor of Reef Check Malaysia's activities since 2008 for four years.



*Beach Clean-up with school children at Tanjong Jara Resort*



*Volunteer divers cleaning up the reef*

Annually, Tanjong Jara Resort, Reef Check Malaysia and IWC Schaffhausen jointly hold a reef and beach clean-up in support of marine and environmental conservation. In 2009, PADI and Reef Check Malaysia participated in the clean-up exercise, organised to preserve and protect the coral gardens and rare species of marine life at Pulau Tenggol, one of Asia's best kept dive secrets. In October 2010, Tanjong Jara Resort also teamed up with Rip Curl, CIMB Foundation and Canon Marketing Malaysia for a Beach and Reef Clean-Up, termed "Eco Drive 2".

In 2011, Tanjong Jara Resort welcomed the dive season with a community project – "Sustainable Reef Through Education In The Community".

Here, Tanjong Jara Resort joined hands with Reef Check Malaysia and CIMB Foundation on a crusade to educate young school children on sustainability in the sea, reefs, fishing and wastes with hope that in time, they would grow up to become supportive members of the local community and to be sensitive to the environment for generations to come.

Under the project, a team comprised of staff from Reef Check Malaysia, CIMB Foundation and Tanjong Jara Resort designed an Environmental Awareness Programme which they implemented at three local schools in Dungun held recently – Sekolah Kebangsaan Kuala Abang, Sekolah Kebangsaan Seberang Dungun and Sekolah Kebangsaan Pulau Serai. The three-day long visit to the schools saw the team facilitate games related to coral reefs, sustainable management and the environment. Each visit concluded with a colouring competition where six winners from each school received a snorkelling trip to Tenggol Island as a prize. The trip's aim was to allow the children to apply in real life what they have learned during the week.



*Diving and Swimming with Giant Whale Sharks near Tenggol Island*



*Sea Turtles Swim Close to Tenggol Island*

In addition to the programme at the local schools, a three-day programme was conducted with students of Garden International School from Kuala Lumpur and Kuantan at the resort. The programme included activities such as a snorkelling trip to Tenggol Island, beach clean-up with the local school children, a sustainable reef and environment education session, and a presentation to parents and school teachers, culminating with a barbecue dinner.

In 2010, Pangkor Laut Resort also organised its third reef and beach clean-up programme which saw more than 100 of the resort's employees and Reef Check Malaysia volunteers taking part.

- **Coral Nursery and Marine Conservation**



*Staff Naturalists / Marine Biologists at Pangkor Laut Resort maintaining the Coral Nursery*



*Coral 'nubbins' growing at Pangkor Laut's Coral Nursery*

Pangkor Laut Resort is working hand-in-hand with Reef Check Malaysia (RCM) in a long-term programme to rehabilitate coral reefs around the resort and develop sustainable tourism practices. The resort staff also organises an annual clean up with RCM to clean and maintain the reefs around the island.

RCM is also assisting YTL and Pangkor Laut Resort (PLR) to implement an action plan for coral reef conservation and rehabilitation around Pulau Pangkor Laut and more widely around Pulau Pangkor (See Map on the previous page). A two-phase action plan was developed to include:

*Phase 1: Education and Clean Ups:*

Short term (up to 12 months) improvements to the marine environment around Pangkor Laut and creation of the conditions to allow implementation of Phase 2.



*Engaging Staff, Local Communities and Stakeholders at Pangkor Laut*



*Map of Pangkor*

*Phase 2: Conservation:*

This builds on the actions taken in Phase 1 to involve the local community in activities that contribute to conservation and rehabilitation of coral reefs in the area in the long term.

Although the initial focus was on Pulau Pangkor Laut and Pulau Pangkor, the programme has subsequently been widened to include possible conservation actions at nearby islands.

### Project Activities and Outcomes

Working together with the Pangkor Laut Resort, an annual programme has been established on Pulau Pangkor Laut to:

- Conduct awareness talks for resort staff; and
- Clean up beaches and reefs on the island.

Now in its fourth year, the programme has involved over 400 hotel staff members to date.

In 2008, RCM conducted its first Reef Check Survey at a site at Pulau Pangkor Laut to assess the status of the reef. The survey includes an assessment of:

- Number of indicator fish species (including grouper, snapper, butterflyfish);
- Number of indicator invertebrate species (including sea urchins, sea cucumbers); and
- Proportion of living and non-living substrate.

The annual survey programme has highlighted a number of threats facing reefs in the area, including:

- High silt levels restricts coral growth to very shallow water;
- The narrow range of types of habitat in the reef mitigates against larger fish populations (numbers and variety); and
- Nutrient from inland sources is likely to deter growth of some species.

Annual surveys at the site continue, and the monitoring data can be used to develop conservation programmes. However, significant improvements to the coral reefs in the area will be a long term process.

### School Education Programme

RCM has an outreach programme for schools, entitled "Rainforest to Reef". The goal of the programme is to raise awareness of the value and importance of marine ecosystems, and to encourage conservation in a wider sense. Children from three schools from Pulau Pangkor have participated in the programme, which includes:

- Presentations and activities for students in Standard 5, designed to teach students the basics of marine ecosystems; and

- A guided snorkelling tour to nearby Pulau Giam to show students the local marine life.

To date, over 120 children have participated in the programme, which will be extended in 2012.

### Community

Consultations are on-going with a number of local stakeholder groups, including:

- Pangkor Fishermen's Association;
- Fishing boat owners association; and
- Snorkel boat operators.

The objective of the consultations is to raise awareness of the poor condition of the marine environment around the islands and to identify possible improvement projects. Further consultations are planned, in particular to discuss the establishment of marine protected area at sites around Pangkor.

### Reef Rehabilitation

Initial visits to Pulau Pangkor highlighted the poor state of marine resources around the island. Although many tourists to Pangkor participate in snorkelling trips, there is little for them to see. The main snorkelling site, Pulau Giam, is in very poor condition with little surviving coral and few fish. Snorkelling trip operators voiced their concerns over irresponsible operators setting up businesses in snorkel guiding and having a heavy impact on the reefs. There have been attempts to establish an association of operators to try to address these issues, but no progress has yet been made.

We provided training for interested operators in how to manage "eco-friendly" snorkelling trips, to try to encourage more responsible guiding. A two-day course was delivered to 20 snorkel guides in November 2009. Participation was keen and enthusiastic, and follow up training was arranged in early 2010.

Following on from the training, we discussed with local guides options for improving the site. Rehabilitation with coral fragments collected from nearby sites was agreed as the best approach. A two-part programme was designed to establish a "coral nursery" and subsequently to transplant collected corals to a designated rehabilitation site.

In November 2010, a coral nursery was established at Pulau Pangkor, in front of the Pangkor Laut Resort. Coral fragments, or “nubbins”, were collected from nearby healthy reefs and attached to a nursery matrix. This step is essential to allow maintenance of the nubbins, to ensure they remain free of silt and algae, which can smother and kill the corals. Staff from Pangkor Laut Resort are actively involved in the maintenance programme, with scuba divers cleaning the nursery every three days and reporting on growth and mortality rates.

In April 2011, further discussions with local snorkelling guides identified possible transplant sites, and it was agreed that a “safe zone” will be established to protect the transplant site and prevent boat entry and anchor damage. The nurseries will be transplanted later in 2011. At the same time as the transplants are completed, a campaign will be launched for snorkelling guides, tourists and the local community to raise awareness about the value of coral reefs, how they are being damaged and what can be done to conserve them.

#### *Future Programmes*

- ***Pangkor Laut Resort, Perak***

The programme to improve the marine environment around Pulau Pangkor Laut and Pulau Pangkor is ongoing. Future activities will repeat some projects, including staff awareness, Reef Check Surveys and School Education Programmes.

The Coral Transplanting Programme will be an important focal point for further developing the programme. As well as creating an improved tourist product for local businesses, it will create numerous educational opportunities for locals and tourists alike, including additional community awareness programmes. This in turn is expected to facilitate discussions on two other important long term measures:

- Establishing a no-fishing zone around Pulau Pangkor Laut and parts of Pulau Pangkor; and
- Establishing a gazetted Marine Protected Area around the nearby Sembilan Islands.

In particular, the idea of establishing conservation zones has been discussed, and the Department of Marine Parks Malaysia is currently assessing the possibility of establishing a Marine Protected Area around the Sembilan Islands, some 45 minutes boat ride from Pangkor Laut.

- ***Pulau Gaya and Pulau Tiga Resort, Sabah***

The Pulau Gaya (Gaya Island) Resort is being built amidst the existing lush rainforests of Sabah, respecting the natural environment – All trees, marine ecosystems and topography are being faithfully preserved. Notably, a Preliminary Environmental Impact Study was conducted by Reef Check Malaysia prior to the resort’s construction, mapping out areas of ecology and hence helping with measures to protect the local environment. The architecture features elements of traditional Sabahan architecture, respecting local culture and methods of construction.



*The Pulau Gaya Resort, developed with sustainability in mind, is slated to be opened next year*

Pulau Tiga is an island well known for its volcanic mud pools, said to be therapeutic, and is home to exotic wildlife, coral reefs and many species of protected marine life. Pulau Tiga has been a haven for adventure and water enthusiasts and the Resort will continue this heritage featuring a number of trekking trails.

Both resorts are being developed with sustainability and the environment in mind.

### EARTH HOUR 2011

Following Malaysia's first **Earth Hour** in 2009, YTL continued to show its support for **Earth Hour 2011** by upping its lights-off commitment to the global collaborative event designed to send a powerful message of hope and action against global warming.

On 26 March 2011, 36 of the Group's iconic landmarks and establishments, including Malaysia, Singapore, Indonesia, Thailand, Japan, and United Kingdom, switched off their lights for an hour from 8.00 pm to 9.30 pm, in a move that underlined the Group's belief in the collective power of individuals in reversing the tide of climate change.

The commitment was also in line with YTL's long-standing 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. Based on just 15 properties in Malaysia and Singapore alone switching off their lights from 8.30 pm to 10 pm, YTL will cut over 1,298 kg of CO<sub>2</sub> emissions which is the equivalent of almost 1,000 working days of computer usage<sup>7</sup>.

To celebrate the meaningful hour of darkness, YTL held special Earth Hour Celebrations at its properties at both Lot 10 in Kuala Lumpur and Wisma Atria in Singapore.



*Candles forming the number '60+' were lit at Starhill Gallery to signify YTL's commitment this year to 'go beyond the hour' in observing the meaningful event*



*The kitchen continues to operate while lights are dimmed to minimum at The Hilton Niseko Village in Japan*



*Observing and celebrating Earth Hour with stunning views of the skyline at Lot 10's "Forest in the City" Rooftop*

### Earth Hour Celebration at Lot 10 "Forest in the City" Rooftop Garden, KL



*Earth Hour celebrations in Wisma Atria, Singapore*

<sup>7</sup> Based on 7,697 hours of desktop PC usage as calculated by YTL-SV Carbon Sdn Bhd



During YTL's third Earth Hour Celebrations in KL, participants observed 90 minutes lights-off from 8.30 pm to 10.00 pm. To mark this meaningful 1.5 hours of darkness, YTL also held a special Earth Hour celebration at Lot 10's "Forest in the City" Rooftop Garden in the heart of Bukit Bintang. Funds were also canvassed by staff and volunteers to support Earthquake Relief Efforts in Japan.

Counting down to lights-off, guests enjoyed the exclusive view atop as the KL cityscape also went dark in honour of the event. The experience was accentuated by The Rooftop's refreshing garden of dappled bark and emerging foliage. Guests cosied up on the lawn under the starlit skies and were left captivated by the serenading vocals of Malaysia's young and talented singer-songwriters Reza Salleh, Narmi and Diandra. The event was emceed by local celebrity Megan Tan, and saw performances by the Tugu Drum Circle, who left guests enchanted by the beats of their rhythmic percussions.



*Singer-songwriter Narmi performing at the celebrations in Lot 10*

Guests also had the chance to commit themselves to going beyond the hour with the Candle Pledge, where they could pledge to practice one sustainable activity in their daily lives. During the hour, YTL-owned hotels and restaurants across the nation also celebrated with their own host of activities. Guests at Shook! and Fisherman's Cove in Starhill Gallery were served specially prepared Earth Hour menus by candlelight while being serenaded by a team of talented musicians.

### **Celebrate Earth Hour @ Orchard 2011, Singapore**



*VIPs at Earth Hour celebrations in Wisma Atria, Singapore, just before the shopping mall plunged into darkness...*



*...and after the lights went off*



*Lively performances during Earth Hour in Singapore kept the crowd entertained*



In keeping with YTL's support of Earth Hour for the third year, YTL seeded the idea of developing a street-long event in Orchard Road with the Orchard Road Business Association (ORBA) to commemorate Earth Hour and spread its message on 26 March 2011. As such, the inaugural **Celebrate Earth Hour @ Orchard 2011** was successfully launched, with the participation of over 100 retailers and 40 malls and hotels along Singapore's famous shopping street. YTL Corporation was the Presenter Sponsor of the event while ORBA was the Organiser.

The event was launched at Wisma Atria, a YTL-owned mall under Starhill Global REIT, with a

switch off ceremony attended by Guest of Honour Member of Parliament Baey Yam Keng, celebrity Denise Keller and representatives from ORBA, WWF and YTL. To tie in with the theme of **60+: Going Beyond the Hour**, participating properties switched off their façade lights and video screens for 90 minutes from 8.30 pm to 10 pm.

The event also saw a 'sea of candles' pledged by the public at 20 candle stations along the pedestrian malls. Outdoor music and dance performances were also staged at various malls during the 90 minutes of darkness. YTL subsidiary Power Seraya also joined in by bringing members from the Spastic Children's Association of Singapore to Orchard Road to enjoy the festivity.

Reinforcing our Earth Hour commitment, 20 YTL staff volunteered on the evening itself to canvass public donations for earthquake relief efforts in Japan, a reminder that everyone plays a part at Earth Hour and beyond. This celebration in Singapore is part of YTL's larger global celebration involving 36 YTL subsidiaries and properties from Malaysia to Japan and UK.

In recognition of YTL's efforts, WWF awarded YTL Corporation, Wisma Atria and ORBA the **"Best Party Award"** at its Earth Hour Participation Award Ceremony in May 2011.

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

#### YTL Establishments which supported Earth Hour 2011 include:

- YTL Corporation's Headquarters
- One Oriental Place
- Starhill Gallery
- Lot 10
- Sentul Park
- Sentul Park Koi Centre
- The KL Performing Arts Centre
- The Maple at Sentul West
- The Tamarind at Sentul East
- The Saffron at Sentul East
- Lake Edge, Puchong
- Pantai Hillpark
- JW Marriott Hotel Kuala Lumpur
- The Ritz-Carlton, Kuala Lumpur
- The Residences at The Ritz-Carlton, Kuala Lumpur
- Vistana Kuala Lumpur
- Vistana Penang
- Vistana Kuantan
- Pangkor Laut Resort
- Tanjong Jara Resort
- Cameron Highlands Resort
- Spa Village Kuala Lumpur
- Spa Village Resort, Tembok, Bali
- The Majestic Malacca
- The Green Leaf Niseko Village, Japan
- Hilton Niseko Village, Japan
- The Surin, Phuket
- Wisma Atria, Singapore
- PowerSeraya, Singapore
- Wessex Water, UK
- KLIA Ekspres
- YTL Princess

## ONGOING OUTREACH THROUGH CLIMATE CHANGE WEEK

Climate Change Week is YTL Corporation's flagship educational outreach programme designed to raise environmental consciousness amongst Malaysians as well as inspire them to be part of the solution to the urgent issue of global warming. Previous Climate Change Week activities in 2007, 2008, 2009 and 2010 included:

- Global Book Launches of environment and climate change-related books including:
  - *"Cut Carbon Grow Profits: Business Strategies for Managing Climate Change and Sustainability"* co-edited by Dr. Kenny Tang, CEO at Oxbridge Climate Capital, and Ruth Yeoh, Executive Director at YTL Singapore Pte Ltd
  - *"WASTEnomics"*, co-edited by Dr. Kenny Tang and Jacob Yeoh, Deputy CEO at YTL Communications
  - *"Billy the Plastic Bag"*, a Children's Book by Gabriel Tseng of Kids for Earth Asia, with book sales donated to environmental organisation(s)
- Televised exclusive Malaysian Premiere of *Strange Days on Planet Earth*, an award-winning documentary in partnership with the National Geographic Channel
- Free week-long public screenings of award-winning eco-documentaries, including *An Inconvenient Truth* and *The 11th Hour*



Dr. Kenny Tang, CEO at Oxbridge Climate Capital, and Ruth Yeoh, Executive Director of YTL Singapore Pte Ltd at the Malaysian Book Launch of *Cut Carbon, Grow Profits* in 2007



- Business Conferences – usually one-day climate change business strategy conferences on climate change solutions
- A Climate Change Gala Dinner with a mission to help raise funds for three Malaysian conservation groups
- *"Sustainable Living in the City"* Eco Bazaar to encourage sustainable living and recycling
- Launch of the *YTL Fellowship for a Rare Planet* with Rare Conservation
- Launch of the first National Geographic Store in Kuala Lumpur at Lot 10
- Youth Workshops – free, interactive full-day workshops targeted at secondary schools in the Klang Valley, held at KLPac



Dr Kenny Tang & Jacob Yeoh at the Media Launch of the Book, *"WASTEnomics"*, in conjunction with YTL's Climate Change Week 2008



*Ruth Yeoh, Executive Director at YTL Singapore Pte Ltd, at the Book Launch of "Billy the Plastic Bag" together with authors Gabriel Tseng and Raphaelle Tseng*



*The International Traveler collection by National Geographic*

The National Geographic (NatGeo) Store in KL is a joint venture between YTL Corporation Berhad and Worldwide Retail Store S.L. – a Barcelona-based partner of the National Geographic Society responsible for National Geographic Retail Stores around the world.

Drawing on National Geographic's 120-year heritage of inspiring people to care about the planet, this Store brings together the Society's exclusive products and services in a constantly evolving, highly experiential and culturally inspired setting. Lot 10, owned by YTL Corporation Berhad, marks National Geographic's fourth global Store after Regent Street, London, Vivo City, Singapore, and Malaga, Spain. The Store Opening builds on the success of National Geographic's strong customer base for its media products in Malaysia and also Malaysia's thriving conservation community.

Currently, the National Geographic Society has more than 360 million members worldwide from its television programs, online outreach and magazine. More than a traditional retail environment, the National Geographic Store in KL boasts compelling multisensory elements, interactive visual displays and state-of-the-art design dedicated to stimulating, educating and inspiring visitors to celebrate global cultures and natural environments.

There will always be something new to experience at the Store, whether one is an intrepid explorer, adventure seeker or passionate nature lover. The family-friendly exhibition area features a rotating showcase of curated exhibits, inspired by content from National Geographic's international channels, magazines and mission-oriented projects, such as the Geographic Project, that inspire, intrigue, and educate people about our planet, its wonders and its challenges.



*Justlife representatives demonstrating to the crowd at Climate Change Week how to make eco enzymes which can be used as natural cleaning agents*

For more information and details on our Climate Change Week programmes, 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.

## NATIONAL GEOGRAPHIC STORE, KUALA LUMPUR



*The National Geographic Store, Kuala Lumpur*

National Geographic Stores worldwide also regularly organise public lectures by some of its most renowned explorers, authors and photographers. The marketplace will feature a wide selection of National Geographic products, including its award-winning magazines, books and DVDs, as well as newly created products and unique items, sourced from global artisans. The Store also specialises in beautiful, sustainable and one-of-a-kind hand-crafted items sourced from locations around the world and exclusive to the Store. It also features items produced, sourced or selected by National Geographic.

Key product lines include National Geographic's Rugged Basic, International Traveller and Explorer Gear clothing lines and accessories; casual and expedition-style footwear; a full range of optics, from eyewear and binoculars to telescopes; journals, calendars and other stationery products; maps, atlases and guidebooks; watches; and a wide selection of children's products. Also on offer are items designed for the rigors of adventures and exploration, including hi-tech waterproof bags and innovative, multi-layered clothing suitable for diverse climates and activities.

The National Geographic Store takes its interest in world culture and exploration very seriously, and this interest is reflected in its in-store Café which serves *Pinchos*, a traditional way of eating that originated in Spain. Consisting of miniature offerings such as a range fresh, organic, and carefully sourced ingredients – they encourage food to be shared and offer a great alternative to the modern urban diet. Award-winning Spanish chef Miguel Espinosa has designed the menu to incorporate healthy ingredients with great flavours, and a Mediterranean tradition that will allow one to relax, savour the fantastic flavours and be transported on a culinary tour of the globe.

Notably, National Geographic's net proceeds support the Society's exploration, conservation, research and education programmes.

Famous personalities in conservation have already visited the National Geographic KL store including fellow Malaysians Hollywood Actress Dato' Michelle Yeoh and Malaysia's first Astronaut, Dato' Dr. Sheikh Muszaphar Shukor. The latter hosted an Event at the Store last year together with Members of the Association of Space Explorers' (ASE) 23rd Planetary Congress.



*Tan Sri (Dr) Francis Yeoh and Dato' Michelle Yeoh at the National Geographic Store at Lot 10, KL*



*(L-R) Cosmonaut Yury Usachev and Natalja Kuleshova, Datuk Dr. Sheikh Muszaphar, Cosmonaut Viktor Savinykh and Alexander P. Alexandrov, Tan Sri (Dr) Francis Yeoh, Andy Turnage (behind Yeoh), Astronaut Richard Richards at Lot 10's National Geographic Store, KL*

More information on the National Geographic Store, Kuala Lumpur, is available on its website at [www.ngklstore.com/kl.html](http://www.ngklstore.com/kl.html).

#### Art and Handicraft Classes for Children

In collaboration with YTL Platinum Plus, YTL's Customer Service Platform at its malls, the National Geographic Store in KL hosts Art and Handicraft Lessons for Children at its premises. Artists and Art Instructors guide children in creating objects using recycled materials. It is an excellent platform to inspire children and the next generation to care for the planet and in line with the store's mission to educate on the environment.



### THE COPENHAGEN COMMUNIQUÉ ON CLIMATE CHANGE

Last year, YTL Corp signed up to support and be part of the **Copenhagen Communiqué on Climate Change**, which is widely recognised as the definitive progressive statement from the international business community. The communiqué, issued ahead of the UN Climate Change Conference in December 2010 by business leaders of over 950 companies from over 60 countries, calls for an ambitious, robust, and equitable global deal on climate change that responds credibly to the scale and urgency of the crises facing the world today. YTL joined major international companies such as Bank of America Merrill Lynch, Coca-Cola, Deloitte, Johnson & Johnson, Nike, National Australia Bank, and more in its endorsement of the communiqué as part of its commitment to being a responsible corporate citizen.

The Communiqué has prompted the world's major economies to, for the first time, make commitments to curb emissions at the UN Climate Change Conference. However, the Corporate Leaders Group on Climate Change (CLG) that brought together business leaders from major UK, EU and international companies in tackling climate change believes that there is a long way to go. The Corporate Leaders' Group is making efforts to work with governments, NGOs and other business groupings to secure an ambitious, robust, and equitable legally-binding UN deal as soon as possible.

Please see their website for more information on their signatories and supporters:  
[www.copenhagencommuniqué.com/signatories/signatories-by-region/asia](http://www.copenhagencommuniqué.com/signatories/signatories-by-region/asia).

### THE CANCUN COMMUNIQUÉ ON CLIMATE CHANGE

YTL Corp has also signed up to support and be part of the **Cancun Communiqué on Climate Change**. The Cancun Communiqué on Climate Change demonstrated the progressive consensus of the international business community ahead of the United Nations (UN) Climate Change Conference in Cancun in December 2010. It is built on the significant momentum created by the Copenhagen Communiqué, and made it clear that the case for a comprehensive international framework to tackle climate change still stands and is increasingly urgent, urging governments to both redouble their efforts to achieve this framework and also to take necessary and appropriate mitigation actions in parallel with such efforts.

The signing of the Cancun Communiqué demonstrated that the progressive consensus within the international business community in support of an ambitious, robust and equitable deal on climate change survived Copenhagen, and that world leaders needed to redouble their efforts to agree such a deal and also take appropriate measures to tackle climate change today. The Cancun Communiqué was an initiative of The Prince of Wales's Corporate Leaders' Group on Climate Change which is run by The University of Cambridge Programme for Sustainability Leadership.

Please see their website for more information on their signatories and supporters:  
[www.cancuncommuniqué.com/signatories/signatories-by-region/asia](http://www.cancuncommuniqué.com/signatories/signatories-by-region/asia).

### THE 2°C CHALLENGE COMMUNIQUÉ ON CLIMATE CHANGE

The **2°C Challenge Communiqué**, launched in October 2011, takes the initiatives put forward by the Copenhagen and Cancun Communiqués a step further. The 2°C Challenge Communiqué calls for urgent action to stabilise global warming to less than 2°C, as was agreed in Cancun. While acknowledging the progress made by previous Communiqués on Climate Change, the 2°C Challenge Communiqué stresses that unless checked by critical measures, the 2°C boundary will be crossed at the current rate of progress, and urges governments to adopt national policies and measures without delay, even before a new international treaty is established.

This statement, together with the previous Communiqués issued, collectively reinforce that world leaders need to redouble their efforts to agree on a robust global deal and also take urgent and appropriate measures on a national scale to tackle climate change today.

## SUPPORT FOR ENVIRONMENTAL ORGANISATIONS

### RARE Conservation



International conservation group **Rare** provides comprehensive training in community outreach and social change and works globally to equip leaders in the world's most threatened natural areas with the tools and motivation they need to care for their natural resources. Boasting success in 50 countries, Rare trains local leaders to run what are called *Rare Pride* campaigns – designed to inspire communities to take pride in their unique natural resources while finding viable alternatives to environmentally destructive behaviours.

Pride campaigns take a two-pronged approach:

- (i) developing sustainable alternatives to threats such as over-fishing, deforestation, and habitat destruction that can be implemented and scaled in communities region-wide; and
- (ii) running targeted outreach campaigns that give people the motivation and capacity needed to adopt these alternatives.

Working alongside Rare to support their Pride campaigns are **WWF Malaysia** and **Reef Check Malaysia**, both of whom were successfully engaged by Ruth Yeoh, Director of Investments at YTL Corp, who was elected to Rare's Board in 2008 and now serves as their youngest trustee. Ruth actively travels on trustee duty for field visits to remote regions and communities to participate in conservation programmes around the globe.

- *YTL Fellowship for a Rare Planet*

On 21 June 2010, YTL launched an unprecedented community-based conservation programme, the *YTL Fellowship for a Rare Planet*. The Fellowship fund in support of Rare amounts to a commitment of US\$2 million – one of YTL's largest conservation gifts to date. Over the four years covered by the grant, the fund will be used to train and equip over one hundred new leaders across Asia, primarily in Malaysia, Indonesia, China, and the Philippines, using Rare's proven training models.

Known as "Rare Conservation Fellows", each local leader accepted into the programme will receive a globally-accredited Master's Degree in Communications designed specifically for conservationists, as well as two years of support in running a Pride campaign for forest and marine conservation in his or her own community.

In the Fellowship's first year, YTL Fellows and the Pride Campaigns they lead have already impacted over 20% of 205 Pride campaigns launched since the early 1980s, making significant strides towards lasting conservation impact in China, Indonesia, Timor Leste, and the Philippines. Rare estimates the YTL Fellowship will directly impact approximately 2,000,000 of the world's most underprivileged who are most vulnerable to climate change and depletion of the natural resources upon which they depend.

Among the achievements in the first year of the programme was the identification of 22 sites in the Coral Triangle, one of the world's richest marine ecosystems which Malaysia is a part of, to save its dwindling reefs and fisheries. The programme is also set to benefit the proposed Tun Mustapha Marine Park in Sabah, where efforts are underway to gazette the marine protected area as well as reverse the effects of over-fishing that has threatened its local economic lifelines and ecotourism.

YTL believes passionately that the challenge of climate change cannot be met without mobilising local communities, providing feasible alternatives to people with limited options, and building local leadership capacity to meet the above challenges. The Group's partnership with Rare signifies its belief in the organisation's capability to achieve the goal of making sustainable living a reality at the community level through sophisticated tools and training.



*A Rare Pride campaign in Borneo aims to protect the forest habitat of the Bornean Orangutan by motivating farmers to adopt agroforestry systems in order to reduce deforestation (Photo courtesy of RARE / Jason Houston)*

### Reef Check Malaysia

YTL is a proud supporter of Reef Check Malaysia (RCM) 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.

In 2009, Ruth Yeoh, Executive Director at YTL Singapore Pte Ltd, was elected to the Board 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.

Reef Check Malaysia works to preserve some of the richest marine biodiversity in the world housed in the country's waters, including some 3,600 kilometres of reef, including fringing reef and offshore islands, and over 350 species of hard coral. Malaysia is part of the 'Coral Triangle', an area recognised by scientists as having the richest marine biodiversity in the world, making the case to protect them even more valid. In response to the urgent need to protect Malaysia's coral reef, Reef Check Malaysia has already embarked on the following initiatives together with YTL, as mentioned previously in the section "Protection of the Environment" ("Hotels and Resorts").

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

### The Nature Conservancy

The Group continues to be a strong supporter of **The Nature Conservancy (TNC)**. TNC is a leading conservation organisation working to protect the most ecologically important land and waters around the world, with 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 Sock Ping, is a long-time member and Trustee of the organisation, and YTL has made a previous significant donation of US\$500,000 to TNC.

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;
- Obtained the 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; and
- Addressed threats to conservation involving climate change, fire, fresh water, forests, invasive species, and marine ecosystems.



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 Centre** to be developed in Borneo consisting of a small group of TNC staff expert in forestry, forest ecology, training and communications.

The US\$500,000 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.

Visit [www.nature.org](http://www.nature.org) for more information.

### WWF-Malaysia

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 runs projects covering a diverse range of environmental protection and nature conservation work in Malaysia.

More information on WWF-Malaysia can be found at [www.wwf.org.my](http://www.wwf.org.my).

### 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, and 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.



*Map of Indo-Malay region to be developed (Courtesy of The Nature Conservancy)*

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)* continues with its community recycling efforts, for which it has received funding from YTL in 2008, through its Climate Change Week initiative. The TrEES environmental programme seeks 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.

In 2010, TrEES collected approximately 50 tonnes of paper, plastics and metals from the participating welfare homes in their Recycling Programme. To date, in 2011, they have collected an additional 20 tonnes of materials. In addition, TrEES also serves as a Reference Centre providing advice and assistance to individuals, community groups and organisations to help them in their efforts to establish recycling and waste reduction programmes in their community/organisation. Efforts include YTL's recycling initiative at the Earth Hour Celebrations, and Resident Groups from TTDI, Kelana Jaya, Hulu Kelang and Mont Kiara.



*TrEES Bins set up at Welfare Homes*



*TrEES collecting Recyclables at Welfare Homes*



*TrEES' Centre at Taman Jaya*

Through TrEES, YTL has also successfully implemented a recycling programme at the Group's Headquarters in Kuala Lumpur, and TrEES continues to collect recyclables from YTL's Offices at both YTL Plaza and One Oriental Place. After the Earth Hour Initiative, TrEES has also expanded its collection to include recyclables from YTL's commercial properties at Lot 10 and Starhill Gallery in KL.

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. Its projects range from grassroots and action oriented projects to policy advocacy projects.

Current projects include:

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

## MEMBERSHIPS

### *The Institute of Corporate Responsibility Malaysia*

YTL Corp is a 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, the environment, and society. The main

objective of ICRM is to promote the development of socially responsible business practices. As outlined by ICRM, 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 Securities Berhad.

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; and
- Attending review meetings on a quarterly basis.

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

### *The World Economic Forum*

YTL is a Corporate Member of the World Economic Forum (WEF) an independent international organisation committed to improving the state of the world by engaging business, political, academic and other leaders of society to shape global, regional and industry agendas. Our Managing Director, Tan Sri Dato' Dr Francis Yeoh, has been invited to speak at several WEF Conferences (traditionally held in Davos) previously.

More information on WEF can be found at its website: [www.weforum.org](http://www.weforum.org).

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 CO<sub>2</sub> 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.



Want to know more?

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

## THE LOW CARBON DIET

### 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 CO<sub>2</sub>. 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.



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