
The Parliament of the Commonwealth of Australia

Report on the visit to Singapore and Malaysia, 25–30 October 2015

House of Representatives
Standing Committee on the Environment

February 2016
Canberra

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Membership

Membership of the Delegation

Delegation Leader	Mr Tony Zappia MP
Delegation Members	Mr Andrew Broad MP Mr Andrew Giles MP (Singapore only) Mr Nickolas Varvaris MP
Delegation Secretary	Ms Julia Morris

Membership of the Committee

Chair	The Hon. John Cobb MP	
Deputy Chair	Mr Andrew Giles MP	
Members	Mr Andrew Broad MP	Mr Tony Pasin MP
	The Hon. Mark Butler MP	Mr Nickolas Varvaris MP
	The Hon. Mark Dreyfus QC MP	Mr Jason Wood MP
	Ms Nola Marino MP	Mr Tony Zappia MP

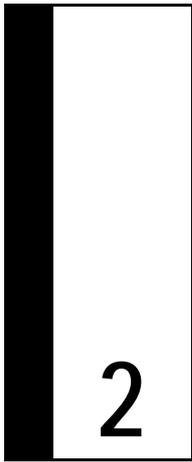
Introduction

- 1.1 The House Environment Committee was selected to undertake the Asia Pacific visit in 2015. While the Committee was not undertaking a specific inquiry at the time nominations were requested, it identified several issues which have been of interest in its recent and current work plan. These included issues relating to greenhouse emissions, renewable energy, environmental protection and biodiversity conservation, governance frameworks for appropriate monitoring of environmental impacts of development, and shared responsibility across jurisdictions for such matters.
- 1.2 In consultation with overseas missions in Singapore and Malaysia, a program was developed which included a range of activities designed to enable the Committee to get a better understanding of key environmental challenges and opportunities currently relevant to those countries, and the bilateral and multilateral relationships affecting Australia's position in the region.
- 1.3 The programs in both Singapore and Malaysia contained opportunities for Committee members to get a closer understanding of such issues as renewable energy, sustainable buildings and urban planning, pollution monitoring, biodiversity preservation, and meeting targets in various environmental areas.
- 1.4 The Committee greatly appreciated the opportunities provided throughout the visit to establish new relationships, and further develop the already strong ties with these important regional neighbours. The report contains observations made during the many meetings, visits, and site inspections, and outlines some possible ways forward for future productive engagement.
- 1.5 The programs, including details of meetings held, are included in Appendix A. The Committee expresses its thanks to the professional and dedicated officers working in both posts, who demonstrated a clear

commitment to the success of the visit, and who prepared and managed a wide range of opportunities in formal and less formal settings for the Committee to conduct a successful visit. Given the condensed nature of the program, each day was intensive and the Committee was pleased that so many appointments could be secured which was an efficient use of time. The Committee also acknowledges the valuable input from all participants in meetings and visits, and thanks them for the time and energy given to ensuring that the visit was productive, educational, and enjoyable.

Overall impressions from Singapore and Malaysia

- 1.6 During the visit, one of the most immediately apparent environmental issues facing Singapore and Malaysia was the impact of trans-border haze, resulting from fires caused by slash-and-burn agricultural clearing in the region. Not only was this issue demonstrated in poor air quality in all places visited, it arose in all discussions with international counterparts. It was clear that there was a sense of frustration that the impacts of actions in one area could have such serious effects on neighbouring populations. It was suggested by many that the haze experienced this year in both Singapore and Malaysia has been worse than any previous year, and that it has had extremely serious negative consequences, including school closures, respiratory illness, and other environmental impacts. The Committee observed that responses range from frustration, to a sense of futility that the situation may never improve. While the issue of haze was not initially central to the aims and objectives of the program, the Committee acknowledges its significance, including in all daily media before, during, and since the visit. It was a key issue raised in every meeting.
- 1.7 Other issues common to both countries related to the use of renewable and sustainable energy, and the importance of managing environmental impacts of development, including urban planning, traffic management, secure water supply, and waste management. Underlying these is the need to balance economic development with a commitment to ensuring good standards of environmental protection and biodiversity conservation. The Committee noted during many meetings that such issues are common to all legislators and citizens globally, and was pleased to be able to learn about and discuss many shared experiences in both countries.



Visit to Singapore

Overall impressions

- 2.1 The Committee was aware of several recurring themes during the Singapore visit. These included the importance of careful urban planning and development, and an approach which includes a clear commitment to both sustainability and security in the medium and long term. The Committee also gained a good understanding of the importance of a motivating factor for development being the establishment and maintenance of Singapore's 'hub' status in the region. Thirdly, the Committee heard on many occasions of the importance of government and non-government agencies working collaboratively to achieve outcomes; it was clear that the highly engaged and cooperative approach of many industry and government bodies has contributed to the rapid success of Singapore's reputation as a stable, progressive, and respected place to do business.
- 2.2 The influence of Singapore's founding Prime Minister, Lee Kuan Yew, remains very strong, and it is obvious that Singaporeans share a strong sense of pride in their own achievements, as well as a commitment to ensuring that his legacy continues. Looking outward, the role that Singapore plays in ASEAN and other regional and international fora is also significant. Collaboration and innovation in technology and other international partnerships will continue to reinforce Singapore's progress and status as an important global player in business and the environment.

Urban planning and development

- 2.3 The Committee was fortunate to meet with many experienced professionals who were able to provide an excellent context of modern Singapore within the historical approach to planning and land use.
- 2.4 During meetings at the Centre for Liveable Cities, and the National Botanic Gardens in particular, the Committee learned of the long held commitment to careful management of scarce resources in a limited geographic area. The Committee heard of founding Prime Minister Lee Kuan Yew's wish to provide 'a clean and gracious environment for rich and poor alike', and the commitment in the 2009 Sustainable Singapore Blueprint to 'a lively and liveable Singapore, one that Singaporeans love and are proud to call home.'
- 2.5 The Committee notes that the Sustainable Singapore Blueprint 2015 outlines a national vision and plans for a more liveable and sustainable city-state. It is designed to support the diverse needs and growing aspirations of Singaporeans, and includes the following sustainable land planning principles:
- adopt innovative ideas to improve the living environment and optimise land use;
 - promote public transport by providing an extensive rail network and optimising and intensifying land use around rail stations;
 - decentralise commercial centres to provide more jobs near homes and reduce travel and peak hour traffic congestion;
 - provide a quality living environment by offering housing choices and comprehensive amenities within each new town;
 - conserve the natural and built heritage by safeguarding nature reserves and nature areas and conserving buildings of special significance; and
 - foster community spirit through the provision of public spaces and by facilitating active civic participation in sustainable development.

From a 'garden city' to a 'city in a garden'

- 2.6 Immediately apparent in Singapore is the extent of green space, including green space bordering all roads and highways. Given that Singapore is the third most densely populated country in the world, the extent of urban green space and parkland is particularly impressive. The Committee heard on many occasions about the importance of long-term and secure planning. From ensuring appropriate space for development of public transport infrastructure, to a commitment from the early days of

independence to maintain a deliberate focus on treeplanting, the city maintains a highly organised and planned appearance.

- 2.7 Presenters at meetings at both the Centre for Liveable Cities, and National Parks, referred to the deliberate and ongoing policies to ensure that the 'greening' of Singapore continued. Since the 1960s a deliberate greening campaign of streetscapes resulted in mass treeplanting throughout the city, initially to provide shade. These policies extended to provide parks for communities, including integrating parks into residential estates. The future plans for extension of the Park Connectors (literally, interlinking parks which provide green corridors for cycling commuters and recreational purposes) are impressive. Since 2009, 100km of cycling paths have been built, and one half of new residential and one third of new commercial buildings have been 'greened' under the Landscaping of Urban Spaces and High Rises Scheme.
- 2.8 According to Mr Wong Tuan Wah, Director of Conservation, National Parks, a key achievement has been a recent survey result where 70 per cent of Singaporeans agree with the statement that 'the image of Singapore as a garden city enhances my identity as a Singaporean.' The Committee learnt of the six strategic thrusts of the National Parks policy:
- establish world class gardens;
 - rejuvenate urban parks and enliven streetscapes;
 - optimise urban spaces for greenery and recreation;
 - enrich biodiversity in our urban environment;
 - enhance competencies of landscape and horticulture industries; and
 - engage and inspire communities to co-create a greener Singapore.
- 2.9 The Committee also learned that interactions between residents and local fauna need careful management, particularly in such a densely populated city – it was not uncommon for prized *koi* carp in domestic ponds to be threatened by roaming otters.

Energy security

- 2.10 Energy themes arose throughout many of the key program meetings during the visit, and the Committee heard on many occasions of the importance of energy security for Singapore. Singapore demonstrates a strong commitment to renewable energy as part of its energy mix, and is clearly conscious of its significant role as an energy hub for the region.
- 2.11 The Committee was fortunate to undertake its visit during Singapore International Energy Week, an annual week-long platform where energy professionals and observers discuss and share challenges and

opportunities. The Committee attended the opening session as well as a discussion about building energy resilience. The Committee is keenly aware of the importance of finding appropriate energy mixes for global economies, and the need to adapt nimbly to global shifts in both energy markets and in response to the challenges posed by a rapidly changing climate.

- 2.12 In his keynote address, Mr Fatih Birol, the newly appointed executive director of the International Energy Agency, made observations regarding changing energy prices, political momentum for sustainable energy supplies while maintaining a global commitment to reduction in carbon emissions, and the status of renewable energies as a mainstream fuel source which will be responsible for two thirds of all new power plants.

Water security

- 2.13 The Committee learned a great deal about Singapore's ongoing challenges in providing water to its population, including its 'four tap policy', with water supplied from the variety of sources, including regional neighbours. The Committee also observed the significance for water supply to industry, and the obvious need for good quality recycled water for domestic and industrial supply.
- 2.14 The Committee noted that since their introduction in 2008, mandatory schemes have led to a reduction in domestic water consumption.

Waste management and recycling

- 2.15 The focus on domestic level household recycling and water use has grown in recent years, according to many participants in various meetings. There is an emerging acknowledgement of the importance of community engagement, including outreach programs in schools, to ensure that the population is educated about the value of recycling scarce resources. In recent times this has included not only a commitment to recycle general domestic consumer waste, but also food waste – the Committee understands that pilot programs are currently under underway.

Singapore as a regional hub

- 2.16 The issue of Singapore as a hub location for many regional services was a recurring theme of the visit. The Committee understands the strategic importance for Singapore of water and energy security, but also its focus on ensuring political and economic stability, enabling it to be an attractive base for many businesses in the region. The Committee notes that

Singapore currently provides regional and global headquarters of more than 35 000 firms. It has fostered the growth of key industries, including currency and commodity trading, transshipment, oil and gas refining, and wealth management, currently managing approximately AUD1.7 trillion in private wealth funds.

- 2.17 The Committee was pleased to be able to meet with regional business representatives, including Australians, to learn about the importance of strategic connections, and gain an understanding of how they are maintained. All were encouraging about the prospects for growth and their long term commitment to the Singaporean market.
- 2.18 Australian business representatives particularly referred to Singapore's focus on ensuring successful management of water supply, including recycling of waste water, and energy efficiency measures. Observations were made about the balance of regulation and market forces, and the ongoing need for Australian and other international businesses to operate in ways that will ensure success for partnerships and effective joint ventures in a range of industries, whether in education, engineering, or manufacturing. The strengths of collaboration and cooperation were noted, as well as emerging relationships and investment opportunities.

Singapore as environmental standard bearer

- 2.19 It was very clear throughout the visit that Singapore has a firm and clear commitment to environmental sustainability. As a country with little natural resources of its own, and occupying a very small geographic territory, the maintenance of this environment for so many citizens presents immediate challenges to administration at all levels.
- 2.20 During meetings at the Centre for Liveable cities, and the Asia-Pacific Centre for Environmental Law, and with representatives from the Green Building Council, Energy Management Authority, and others, the Committee was given a good understanding of the importance of both formal regulation and commitments to environmental planning, as well as the active engagement and collaboration by industry and business sectors to ensure that these standards and targets can be met and maintained.
- 2.21 During meetings with the Asia-Pacific Centre for Environmental Law, the Committee learned that while there is no single overarching legislation regarding environmental management, the difference between legislation and implementation was significant in a practical sense. That is, no amount of solid legislation will make up for poor implementation and enforcement. The Committee heard that while Singapore has a range of

legislation and regulations covering governing issues such as environmental protection, pollution, development, there is a long-standing, and ongoing, commitment to ensuring that the environment is considered a key part of any development. The Committee considers that the fact that the National Parks Department lies within the Ministry of National Development, rather than the Ministry for the Environment, demonstrates its stronger presence from the planning stages, and perhaps provides a better opportunity for solid environmental outcomes to be achieved.

Collaboration, engagement and commitment to innovation

- 2.22 The final recurring theme from the visit was the strength of collaboration and cooperation between development interests to ensure timely and efficient outcomes for all stakeholders. The Committee acknowledged the widely-held view that there are significant benefits from managing such a small geographic area, with relatively few bodies with interests in development outcomes.
- 2.23 The Committee was interested to learn of the variety of roles in a whole-of-government approach to policies where parks, community use, and development interests merged. The Committee understands the view that strong governance and strong leadership are needed to reach a common goal. The Committee was also impressed with the descriptions of approaches to issues where collaboration was needed with stakeholder agencies on an ongoing basis, for example, where tree plantings affect other aspects of urban infrastructure such as roads and pavements. The Committee was also interested to learn about the involvement of a Master Planning Committee, which takes an oversight role across many levels.
- 2.24 During a briefing hosted by the Singapore Green Building Council, the Committee was given a comprehensive presentation describing the development of the new South Beach hotel and residences complex. Senior level stakeholders present at the meeting described the approaches to the development, which included a strong conservation element in relation to historic buildings in the precinct. The Committee learned that this was a relatively new approach – that while heritage values are respected and protected to some extent, it is relatively rare for a new building to incorporate restoration and re-purposing of historic areas, in this case colonial buildings which initially housed military barracks and offices. The Committee noted with interest the extent of collaboration from relevant government agencies with business development interests to

produce a building where exceptional environmental standards were achieved.

- 2.25 The importance of calibration of movement between industry and government was also discussed. There is an increasingly clear awareness of the importance of ensuring that in terms of energy efficiency, the market and industry move together in an organised and organic fashion. It was also acknowledged, for example, that the high population density, and fact that approximately 85 per cent of the population living in Housing and Development Board housing (government-built and then privately leased dwellings) means that any government policy change (for example, the introduction of regulations on the installation of energy efficient light globes, or solar panels) is likely to produce immediate effects on the market. It was acknowledged that this collaboration and calibration explains to a degree why progress in Singapore is so fast, and development growth has been so rapid, dynamic and from such a stable base.
- 2.26 During a visit to Sky Greens, a company in an industrial area in the north which operates a vertical, hydraulic 'farm' for the production of leafy green vegetables, the Committee viewed an impressively innovative approach to contributing to domestic food security, as well as a potentially significant role for future exports including technology. The stated goals of Sky Greens are to produce a low carbon operation, with efficient use of resources, in a socially inclusive manner. Since 2010, with initial collaboration and seed funding, and ongoing commitment to pair with other industry stakeholders, the business expects to continue to improve the way in which agricultural production can take place in a low energy environment, using very limited resources and physical space. Such innovative solutions to the challenges posed by strictly defined geography and little natural resource assets are examples of where Singapore leverages itself in a competitive and strategically complex regional and global environment.

Visit to Malaysia

Overall impressions

- 3.1 As noted earlier in this report, in Malaysia the Committee got a very clear sense of the impact of the haze caused by slash-and-burn agriculture, which had been causing health and other concerns for several weeks by the time of the Committee's visit. It reinforced the Committee's perceptions about the challenges of educating citizens about environmentally sustainable development and conservation when daily life is so severely affected by a variable outside the community's immediate control.
- 3.2 The Committee observed on many occasions the strength of the bilateral relationship between Australia and Malaysia. The Committee understands that cooperation between our two countries following the tragic loss of two Malaysian airlines flights contributed to the further strengthening of this relationship, and demonstrated a capacity to work constructively together at such a challenging time.
- 3.3 Malaysia is Australia's second largest trading partner in ASEAN, and eighth largest globally. The Committee notes the importance for Malaysia of its current role as ASEAN chair. While the Committee understands that there are currently some contentious political developments in Malaysia which have caused some public concern, these issues did not arise during meetings during the visit.
- 3.4 The Committee noted in many meetings that, in describing environmental challenges facing Malaysia, there was a difference between perceptions of issues such as enforcement between peninsular Malaysia, and the offshore Territories of Sabah and Sarawak.

- 3.5 Key issues arising during the visit included forestry management, the importance of oil palm plantations and their significant impact on the economy and the environment, and approaches to energy management and environmental protection.

Forestry management and conservation

- 3.6 Apart from the immediate issue of transborder haze, it was clear to the Committee that Malaysia also faces challenges with regard to forest management. This is significant given that in 2013, the World Bank recorded that 67.5 per cent of Malaysia was covered by forest.
- 3.7 During the visit, the Committee was fortunate to meet with representatives from the Forest Research Institute of Malaysia (FRIM), as well as non-government organisations with concerns about forestry management. As noted earlier, the differences between on-the-ground management in peninsular Malaysia, and the offshore territories, appear to cause concerns for some stakeholders, in terms of forest protection, and approved land use for palm oil cultivation in ecologically sensitive habitats. There are some contentious views on the extent of land clearing for cultivation, and possible catastrophic effects such as landslips and soil erosion, with particularly grave consequences during extreme weather events.
- 3.8 During meetings with representatives of FRIM, the Committee was impressed to hear about the extent of research and mapping of species, and monitoring effects of environmental damage, including as a result of logging. The Committee also learned of extensive efforts to ensure that certification standards were set, met and maintained, and that significant efforts have been made to commercialise development of wood products, as well as commercial uses for plant technologies, for example in production of food, cosmetics, and health supplements. Further, FRIM representatives outlined the scope and procedures for engagement with indigenous populations, including how profits from commercialisation are distributed within indigenous communities who have assisted in the identification of medicinal and other properties of plants, and shared their traditional knowledge about their uses.
- 3.9 While FRIM was clearly able to demonstrate how forest areas in Malaysia are gazetted, and thereby given legal protection from clearing, the Committee was also made aware of concerns of some non-government organisations that, in practice, such protection is not always observed, particularly with small- or large-scale illegal land clearing and cultivation

of unregistered or illegal palm oil plantations. The Committee is aware of capacity-building work being undertaken by organisations including the European Union. The Committee took part in discussions regarding the importance of community engagement and awareness, in ensuring that any illegal operation is brought to broader public attention, as a means of contributing to environmental protection and consideration.

Palm oil plantations

- 3.10 The Committee is keenly aware of the importance of palm oil plantations to the economy of Malaysia, and was able to meet with representatives of the Malaysian Palm Oil Board (MPOB), and the Sime Darby plantation and refinery.
- 3.11 The Committee observed during presentations at both locations the significant benefits of palm oil, both as a product, and as a significant contributor to Malaysia's economy. The Committee understands the strong message from the MPOB and Sime Darby, that palm oil plantations, in and of themselves, represent a massive economic input, and are highly regulated and well managed, with enforced standards, and extensive recognition of the benefits of their products at both academic and scientific levels. The Committee also accepts that the majority of plantations on peninsular Malaysia comply with appropriate standards with regard to land use, and operate on a sustainable environmental footing. The Committee also acknowledges, however, that there remains extensive concern from non-government organisations and other observers, that where plantations are not regulated, or are causing significant environmental damage, enforcing standards of operation and sanctions against illegal operations presents an insurmountable challenge. Further, the Committee understands the frustration of both the MPOB, and respected international and national operations, that where so much effort is made to ensure that standards are met (and in many cases exceeded), there is a universal condemnation of the industry when any breaches or environmental damage result from actions taken by less scrupulous operators.

Urban planning and traffic congestion

- 3.12 Many urban issues were discussed during a meeting with the mayor of Malaysia, Ybng Hj Mhd Amin Nordin Abdul Aziz, and representatives from his office. The Committee discussed and shared experiences in urban development, given that two delegation members had extensive experience at the local government level. Approaches to building development, pedestrian access, provision of appropriate car spaces, domestic and commercial waste management, water supply and urban green space were all discussed.
- 3.13 During the visit, the Committee observed first hand issues which arise from the heavy use of private vehicles in Kuala Lumpur in particular. The Committee is aware of plans for development of public transport, as well as possible introduction of measures to reduce the number of cars using Kuala Lumpur's roads on a daily basis.

Energy development and management

- 3.14 The Committee received a comprehensive briefing during a visit to the Sustainable Energy Development Authority (SEDA), and the ministry of Energy, Green Technology and Water. Representatives from SEDA outlined the legislative framework for the Agency's operation, and the current and proposed operation of feed-in tariffs and other incentives.

Environmental protection

- 3.15 The Committee understands that environment protection at a corporate level has taken great strides in recent years in Malaysia. Ms Lee Tzee Wan, from the Group Health, Safety and Environment Division of Petronas, described the development of the role of environmental advisor within the government owned producer and distributor of oil and gas, and the significant input she was able to provide in this capacity to other industry bodies, for example the National Environment Quality Council. An initial role to monitor environmental impacts gradually grew to a point where advisors in industry are now able to assist in innovation and problem solving with a view to limiting environmental damage, improving productivity and outputs, and ensuring that developments are sustainable.

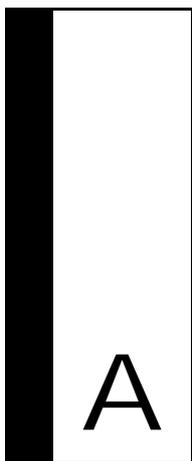
Concluding observations

- 4.1 As noted in the Introduction, the transborder haze issue was at the forefront of many Singaporeans' and Malaysians' minds, and while it was not designed as a focal point of the program, it certainly arose at every meeting, and was a definite point of contention. The Committee was constantly made aware of the range of views for possible resolution of the problem, from resignation and acceptance, to legal challenges to those companies and individuals who may be identified and held responsible. Some felt that stronger international action needed to be taken, including by Australia; others felt that international forums (such as ASEAN) had failed to bring any resolution to this long-standing problem.
- 4.2 While the haze was 'incidental' to the programs' aims in both countries, it highlighted for the Committee the challenges of ensuring that environmental protection is made relevant to people's daily lives.
- 4.3 When seeking economic opportunities, financial security and fair and equitable access to services such as housing and infrastructure, in an environment where people are experiencing severe respiratory illness from unseen but devastating forest fires, it could be reasonably imagined that recycling domestic rubbish may not be front of mind for most Singaporeans and Malaysians. Discussions around community engagement, government regulations (whether involving penalties and/or incentives), and market responses to issues such as energy provision, urban planning or environmental conservation, always included a focus on understanding how and why these issues could be given 'real-life' relevance to ordinary consumers and citizens. While Australians are not living on a daily basis with the serious effects of such extreme air pollution, the challenges around getting environmental messages to be understood and accepted by the community are similarly relevant.

- 4.4 The delegation acknowledges the benefits of better understanding challenges and opportunities in each country, and how these are communicated through person-to-person contacts and meetings. Discussions in both countries were wide ranging, frank and candid. The opportunities for inspections and tours of facilities in both places gave the Committee a more practical, 'hands-on' understanding of issues facing business and other operators. In less formal settings the Committee was often able to more quickly establish matters of common interest – important in an intensive and busy program which, at the Committee's request, had been condensed into a shorter timeframe.
- 4.5 The positive feelings towards Australia as a result of people-to-people contacts were evident throughout the visit. The delegation met many people in both Singapore and Malaysia who were either educated in Australia or have family members who were, underscoring the long term benefits and goodwill accruing through such contact.
- 4.6 Again, the Committee expresses its deep appreciation to all individuals and organisations who were so generous with their time and resources throughout the entirety of the program. The Committee also acknowledges the commitment and professionalism of officials in the High Commissions in both Singapore and Malaysia: their efforts undoubtedly contributed to a successful, productive and educational delegation visit.

The Hon John Cobb MP
Committee Chair
February 2016

Mr Tony Zappia MP
Delegation Leader
February 2016



Appendix A: Visit programs

Visit to Singapore

Sunday 25 October

All delegates arrive Singapore

Monday 26 October (Singapore)

Breakfast meeting with Mr Philip Green, High Commissioner

Attend Singapore International Energy Week (SIEW)

- Opening remarks by Minister S Iswaran, Singapore Minister for Trade and Industry
- Keynote address by Dr Fatih Birol, Executive Director of the International Energy Agency

Visit Sky Greens; briefing and inspection of facility at Sky Urban Solutions

Attendees:

- Mr Jack Ng, CEO and Founder
- Mr Roshe Wong, Business Development Manager
- Miss Josephine Gan, Head of Operations
- Miss Jane Chua, Executive Director

Visit Centre for Liveable Cities; briefing by Singapore Ministry of Environment and Water Resources

Attendees:

- Mr Christopher Tan, Deputy Director of Environmental Policy, National Environment Agency
- Ms Adeline Lim, Deputy Director, Promotions, Centre for Liveable Cities
- Mr Lim Wei Da, Assistant Director, Centre for Liveable Cities
- Ms Kuang Jin Yi, Manager, Centre for Liveable Cities

Visit Singapore Botanical Gardens; briefing by Mr Wong Tuan Wah, Director (Conservation), National Parks Board

Other attendee:

- Ms Nurul Haniza Bte Mohamad Yusuff, Communications Executive

Attend SIEW conference session/discussion: Building Energy Resilience

Tuesday 27 October (Singapore)

Breakfast meeting hosted by the Singapore Green Building Council

Attendees:

- Mr Chia Ngiang Hong, Group General Manager, City Developments Limited, and President, Singapore Green Building Council
- Ms Esther An, Chief Sustainability Officer and Executive Assistant to Deputy Chairman, City Developments Limited
- Mr Anthony Chia, Executive Vice President (Projects), City Developments Limited
- Mr Allen Ang, Executive Vice President, Deputy Division Head/Chief Innovations and Green Building Projects Division, City Developments Limited
- Mr Wong Chung Jeu, Head of South Beach Consortium Pte Ltd
- Mr Tan Kian Chuan, Project Manager, South Beach Consortium Pte Ltd
- Ms Leong-Kok Su Ming, Director, Green Mark Department, Building and Construction Authority
- Mr Ram Bhaskar, Director, Energy Efficiency and Conservation Department, National Environment Agency, and Assistant Treasurer, Singapore Green Building Council

- Assoc Prof Lee Siew Eang, School of Design and Environment, National University of Singapore, and Honorary Advisor, Singapore Green Building Council
- Mr Lee Chuan Seng, Emeritus Chairman, Beca Carter Hollings and Ferner (SEA) Pte Ltd, and Founding President and Honorary Advisor, Singapore Green Building Council
- Mr Ng Eng Kiong, Managing Director, Squire Mech Pte Ltd, and Immediate Past President, Singapore Green Building Council

Inspection of the South Beach hotel and residential development

Visit to Jurong Gardens by the Bay

Attendees:

- Dr Adrian Loong, Director, Research and Horticulture, Gardens by the Bay
- Mr Anton van der Schans, Assistant Director, Gardens by the Bay

Working lunch hosted by Philip Green, High Commissioner

Attendees:

- Mr Scott Harris, Structural Engineer, Arup
- Mr Steve Blencowe, Managing Director, Austin South East Asia Pte Ltd
- Mr Justin Taylor, Director, Kirkham Group Pte Ltd
- Mr Austin Davey, CEO Build Run Repair, Visy Singapore Headquarters Pte Ltd
- Mr Ken Hickson, Chairman/CEO, Sustain Ability Showcase Consultancy Asia Pte Ltd

Visit to the Asia-Pacific Centre for Environmental Law; briefing by Emeritus Professor Koh Keng Lian, Honorary Director

Other attendees:

- Assoc Prof Lye Lin Heng, Director, Asia-Pacific Centre for Environmental Law
- Assoc Prof Burton Ong, Deputy Director, Asia-Pacific Centre for Environmental Law

Program concludes; depart Singapore for Malaysia (Mr Giles returns to Australia).

Visit to Malaysia

Tuesday 27 October (continued)

Arrive Malaysia

Wednesday 28 October (Malaysia)

Briefing with Mr Rod Smith, High Commissioner

Visit to Forest Research Institute of Malaysia (FRIM)

Attendees:

- Dr Norini Haron, Deputy Director-General (Research), FRIM
- Dr Ismail Harun, Director of Forestry and Environment Division, FRIM
- Dr Ahmad Zuhaidi, Director of Forestry Biotechnology Division, FRIM
- Dr Lilian Chua, Head Programme of Forest Health and Conservation, Biodiversity Division, FRIM
- Norhayati Nordin, Head of Corporate Communication Unit, FRIM
- Mohd Nasir Bin Abu Hassan, Director of Silviculture and Forest Biodiversity Conservation, State Forestry Departments in Peninsular Malaysia
- Mohd Saman Bin Mohd Sanget, Assistant Director (Ethnobotany), Silviculture and Forest Biodiversity Conservation, State Forestry Departments in Peninsular Malaysia
- Zamzurina Binti Zulkifli, Assistant Secretary, Biodiversity Management and Forestry Division, Ministry of Natural Resources and Environment
- Edi Hermi, Corporate Communication Unit/Nature Guide, FRIM

Meeting with the Sustainable Energy Development Authority (SEDA)

Attendees:

Ms Catherine Ridu, Chief Executive Officer, SEDA

Dr Datto Ali, Chief Operating Officer, SEDA

Dr Wei-Nee Chen, Chief Corporate Officer, SEDA

Roundtable meeting on Environmental Conservation, at Australian High Commission

Attendees:

- Tom ter Horst, EU Forest Law Enforcement, Government and Trade
- Norizan bt Mohd Mazlan, World Wildlife Fund Malaysia
- Puan Sri To' Puan Datuk Shariffa Sabrina Syed Akil, Association for the Protection of Natural Heritage (PEKA) Malaysia
- Ms Bazlinda Bahrin, PEKA Malaysia
- Ms Sara Dalina, PEKA Malaysia
- Ir. Dr. Zaki Zainudin, Water Quality and Modeling Specialist
- Mr Philip Kimpton, Counsellor, Australian High Commission
- Mr Nik Yusof Farid, Political Researcher, Australian High Commission

Working dinner hosted by High Commissioner, Australian High Commission

Attendees:

- YBhg Datuk Loo Took Gee, Secretary General of Ministry of Energy, Green Technology and Water
- YBhg Datuk Dr. Yee Moh Chai, Chairman of Sustainable Energy Development Authority
- Prof Emeritus Datin Paduka Siti Zuraina Abdul Majid, Former Commissioner of Heritage
- Dato' Dr Ahmad Kamarul Najuib Bin Che Ibrahim, Deputy Director General of Development, Department of Environment
- Dr Gary William Theseira, Deputy Undersecretary of Environmental Management and Climate Change Division, Ministry of Natural Resources and Environment

Thursday 29 October (Malaysia)

Meeting with Ybhg Datuk Mohd Amin Nordin Abdul Aziz, Mayor of Kuala Lumpur

Other attendees:

- Sr Alias Bin Marjoh, Director, Building Control Department
- Abd Jamil

Working lunch hosted by Dr Angela Macdonald, Deputy High Commissioner, with Ms Lee Tzee Wan, Group Health, Safety and Environment Division of PETRONAS

Meeting with representatives of the Malaysian Palm Oil Board (MPOB)

Attendees including:

- YB Datuk Dr Choo May, Director-General, MPOB

Meeting with YB Dr Ong Kian Ming, Member of Parliament for Serdang, Democratic Action Party Spokesman on Environment

Friday 30 October (Malaysia)

Visit to Sime Darby Palm Oil Refinery and site inspection of plantation

Attendees:

- Dr Simon Lord, Group Chief Sustainability Officer, Sime Darby Berhad
- Dr Shariman Alwani, Head, Strategy and Innovation, Sime Darby Plantation Sdn Bhd
- Mr Tang Men Kon, Head, Plantation Sustainability and Quality Management, Sime Darby Plantation Sdn Bhd
- Mr Ezzaruddin Abd Rapor, Head, Special Projects, Upstream Malaysia, Sime Darby Plantation Sdn Bhd
- Mr Mohamed Norin Abu Bakar, Head, Brand Communications, Corporate Communications, Sime Darby Plantation Sdn Bhd

Roundtable meeting on clean energy, sustainable technology and clean water, at Australian High Commission

Attendees:

- Mr Andrew Browning, KIRK Architects
- Ms Choo Ee Li, Senior Water Resource Engineer, SMEC Malaysia
- Mr Rosle Yaakub, General Manager Transformation and Strategic Initiatives, Proton
- Tamarai Selvi Muthysamy, Director, SWA Water Malaysia
- Khailash Dhasan Velautham, Managing Director, SWA Water

Program concludes; depart Malaysia.