

CURRICULUM VITAE

Dr Lai Choo Malone-Lee

National University of Singapore, School of Design and Environment, 4 Architecture Drive,
Kent Ridge Crescent Singapore 117566

Tel: (65) 65161945 Email: sdemalon@nus.edu.sg; rstmalon@nus.edu.sg



Dr. Lai Choo MALONE-LEE is Director of the Centre for Sustainable Asian Cities (CSAC) at the School of Design and Environment, National University of Singapore. She is a researcher on urban issues, with specific interest in urban sustainability, particularly on its nexus with development, economic growth and city culture. She lectures and writes on issues of city densification, livability and wellbeing and their links to sustainability. Together with her research team in CSAC, she has been investigating planning strategies for sustainable growth, particularly for cities in developing countries in Asia, which are complex and challenging but which also present tremendous opportunities for growth and development. She believes that regenerative processes and ecological resource management are fundamental for our cities' future.

Before academia, Dr. Malone-Lee worked with the Singapore government in several areas, including strategic planning and heritage conservation. With a strong background on urban public policy and governance, she contributes to policy debates on critical urban issues through several government committees and think tanks. Regionally, she is a consultant with the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP). She serves as a Board Member of Singapore's National Parks Board.

EDUCATION

- PhD (Urban and Environmental Planning), Tokyo Institute of Technology, Japan
- MSc (Town and Country Planning), University of Sydney

ACADEMIC

- Director, Centre for Sustainable Asian Cities, School of Design and Environment, NUS
- Founding Director, Environmental Management Program, NUS (2001 to 2009)
- Senior Lecturer, Department of Real Estate (courses taught: Environmental Planning: Urban Policy and Real Estate Markets at graduate levels).
- Invited lecturership in NUS-Kings College (Cambridge) Programme on Construction Law and Arbitration (2004 to 2007); National Institute of Education (Environmental Planning) (2006 - 2008), School of Forestry and Environmental Studies, Yale University (2005)
- Associate, Global Asia Institute, NUS (2009 – 2011)

PROFESSIONAL

- Board Member, National Parks Board, Singapore (2012-2013, 2013-2015)
- Consultant on the Benchmarking Study and Establishment of Guidelines for Underground Space Planning and Development in Singapore commissioned by URA, 2014.
- Consultant to United Nations ESCAP on a project to assess capacity building needs on water

management for Asia and the Pacific Region, 2011 – 2013)

- Consultant to United Nations ESCAP on a project to evaluate the Eco-Efficiency of PUB's Active Beautiful Clean Waters Program (2009-2010)
- Head (Urban Conservation), Urban Redevelopment Authority (1989 – 1991)
- Deputy Director (Strategic Planning), Ministry of National Development (1987 – 1989)

PUBLICATIONS

- Malone Lee, L C, "Singapore City Reflections". *A+U Architecture and Urbanism*, 528 (2014): 8 11. (Japan).
- Malone Lee, L C, Reese, A M, C K Heng, I Ahmed, and S Ishtiaque, "Evaluating Food Sustainability in the Context of Resource constrained Cities:". *The International Journal of Food Studies*, 2, no. 4 (2014): 1 18. (United States).
- Eckelman, M, S Nagashima, W Ashton, Y Arakaki, K Hanaki and L C Malone Lee, "Island Waste Management Systems: Statistics, Challenges, and Opportunities for Applied Industrial Ecology". *Journal of Industrial Ecology*, 18, no. 2 (2014). (United States).
- Malone Lee, L C, C K Heng, N Q Duong, T Devisari, Reese, A M, A R Abdul Hamid and I Orlenko, *Benchmarks, Best Practices and Framework for Sustainable Urban Development and Cities*. Singapore, 2014, 2,264 pp. (Research Report).
- Hii, D H J C and L C Malone Lee, "Computational Fluid Dynamics for Urban Design: the prospects for greater integration". *International Journal of Architectural Computing* 9, no. 1 (2011): 33 54. (United Kingdom). (Special CAADRIA Edition "New Frontiers": papers selected from CAADRIA 2010 conference).
- Woo, P W S and L C Malone Lee, "Assessing Skywalk Systems as a Response to High Density Living in Hong Kong". *Dialogues in Urban and Regional Planning Vol 5*. Global Planning Education Association Network. Hibbard, M., Freestone and R., Sager, T.O. (eds.). Oxon: Routledge, 2013. 16 pp.
- Heng, C.K and Malone-Lee L.C. Density and Urban Sustainability: An Exploration of Critical Issues, in Ng, E. (ed., 2010), in Ng E. (ed.) *Designing High Density Cities for Social and Environmental Sustainability*, Earthscan, 41 pp. London, 2012.
- Malone Lee, L C, "Planning for the future: Urban solutions". Singapore: Economic Development Board (EDB), (lead article, invited guest editor), *Future Ready Singapore Series*, focusing on Sustainable urban solutions for greener metropolitan living, 2011.
- Zhang, J, C K Heng, L C Malone Lee, Hii J C, P H T Janssen, K S Leung and B K Tan, "Evaluating Environmental Implications of Density: A Comparative Case Study on the Relationship Between Density, Urban Block Typology and Sky Exposure". *Automation in Construction* (2011). (Netherlands). (Special Edition: Papers selected from eCAADe 2010)
- Lye, I L H, G Ofori, L C Malone-Lee, V R Savage and Y P Ting (eds.), *Sustainability Matters: Environmental Management in Asia*, Singapore: World Scientific Publishing Co Pte Ltd, 2010. 600 pp.
- Heng, C K and L C Malone-Lee, "Liveability, Density and Sustainability", in *Liveable Cities for Tomorrow*, Centre for Liveable Cities, Singapore, 2009. (Report to the East Asia Summit Liveable Cities Conference June 2008).
- Malone-Lee, L C and Chua, Y L, "Land Use and Environment". in *Singapore Futures: Scenarios for the Next Generation Project*, Institute of Policy Studies, Lee Kuan Yew School of Public Policy
- Ong, S E, T F Sing and L C Malone-Lee, "Strategic Considerations in Land Use Planning: The Case of White Sites in Singapore". *Journal of Property Research*, 21, no. 4 (2004): 1(UK)
- Lum, S K, L L Sim and L C Malone-Lee, "Market - Led Policy Measures for Urban Redevelopment in Singapore". *Land Use Policy*, Vol. 21, no. 1 (2004): 1-19. (United Kingdom)
- Han, S S, S M Yu, L C Malone Lee and B Ann, "Dynamics of property value distribution in an Asian metropolis: The case of landed housing in Singapore, 1991 2000". *Journal of Property Investment & Finance*, Vol.20, no. 2 (2002): 254 276. (United Kingdom).
- Sim, L L, S K Lum and L C Malone Lee, "Property Rights, Collective Sales and Government Intervention: Averting A Tragedy of the Anticommons". *Habitat International*, Vol. 26, no. 4 (2002): 457 470. (United Kingdom). (Contribution to Literature on Property Rights)
- Sim, L L, S M Yu and L C Malone Lee, "Re Examining The Retail Hierarchy In Singapore: Are The Town Centres And Neighbourhood Centres Sustainable?". *Town Planning Review*, Vol. 73., no. 1 (2002): 63 81. (United Kingdom).

- Sim, L L, L C Malone Lee and L K H Chin, "Integrating land use and transportation planning to reduce work related travel: A case study of Tampines Regional Centre in Singapore". *Habitat International*, Vol. 25 (2001): 399-414. (United Kingdom).
- Malone Lee, L C, L L Sim and L K H Chin, "Planning for a more balanced home work relationship in a city state". *CITIES*, Vol 18, no. No 1 (2001): 51-55. (United Kingdom).
- Sim, L L, S K Lum and L C Malone Lee, "Collective sales of private housing estates, government intervention and erosion of property rights: The Singapore experience". *International Journal for Housing Science and Its Applications*, Vol. 25, no. 4 (2001). (United States).
- Malone-Lee, L C, "From Generic City to Unique City". *Journal of the Singapore Institute of Architects*, 208:00 (2000): 119-120. (Singapore).
- Malone Lee, L C, "Heritage and planning". *Our Place in Time*. Kwok, K W, Kwa, C. G., et al. (eds.), pp 175-185. Singapore: The Singapore Heritage Society, 1999.

RESEARCH PROJECTS

- Principal Investigator, funded research project "Urban Indicator System for Sustainable High Density Townships", 2012 – 2014.
- Principal Investigator, funded research project "For Forging a Sustainable Future for Asian Cities through Urban Regeneration, 2012-2014.
- Collaborator, research project on "Study of Planning, Design and Community Bonding in HDB Heartlands", funded by the Housing and Development Board, 2012-2014
- Collaborator, research project "Art and Culture Focused Community Spaces and their role in promoting community building, social interaction, and encouraging arts participation", 2013 -2014.
- Co-Principal Investigator, Research Project "Benchmarks, Best Practices and Framework for Sustainable Urban Development and Cities", funded by the Ministry of National Development, Singapore, Jan 2009 to 2014
- Principal Investigator, Research Project "Planning and Development for Sustainable High Density Living: High Density Threshold Studies", funded by the Ministry of National Development, Singapore, Jan 2009 to 2013.
- Lead Contributor, "Land Use and Environment", in Singapore Futures Project: Scenarios for the Next Generation, Institute of Policy Studies, Lee Kuan Yew School of Public Policy, 2013 – 2014.
- Principal Investigator, Research Project "The Study of Urban Sustainability of 'Familiar Places' in Singapore in Relation to Preserving Communities, Property Values and Land Use Optimisation", funded by NUS (2003 – 2004).

CONFERENCE PRESENTATIONS

- Malone Lee, L C, I Orlenko and C K Heng, "An Assessment Framework for Sustainable Land Development in Rapidly Urbanizing Cities". *20th Annual International Sustainable Development Research Conference*, Norwegian University of Science and Technology, Trondheim, Norway, 2014.
- Duong, N Q, L C Malone Lee, Tunas, D. and C K Heng, "Wellbeing And Urban Sustainability: Beyond Social Indicators". *20th Annual International Sustainable Development Research Conference*, Norwegian University of Science and Technology, Trondheim, Norway, 2014.
- Malone Lee, L C, "High Density, High Sustainability and High Liveability". Annual Planning Congress of The Planning Institute of Australia in conjunction with the Global Planners Network, Sydney, Australia, 2014 (Invited keynote presentation).
- Malone-Lee, L C, Commentary on Smart Cities, *Aspen Seminar for Leaders*, Venice, 2013.
- Malone Lee, L C, C K Heng, D N Mallika, B P Manju, S Sathyanarayanan and M R Bhuyan, "Eco cities Revisited: Interpreting eco cities for high density environments in Asia from the dual perspectives of governance and market". *12th International Congress of the Asian Planning Schools Association (APSA)*, Taiwan National University, Taipei, Taiwan, 2013.
- Malone Lee, L C, Reese, A M, C K Heng and A R Abdul Hamid, "Urban Regeneration as a Platform for Sustainable Growth in Asian Cities". *12th International Congress of Asian Planning Schools Association (APSA)*, National Taiwan University, Taipei, Taiwan, 2013.

- Malone Lee, L C, C K Heng, S Sathyanarayanan, B P Manju, M R Bhuyan and D N Mallika, "Developing an Urban Indicator System for Assessing Sustainability Performance of High Density Townships". *12th International Congress of Asian Planning Schools Association (APSA)*, National Taiwan University, Taipei, Taiwan, 2013.
- Malone Lee, L C, "Land and Physical Infrastructure". *Population of Singapore Scenarios 2050 (POS2050)* (invited presentation). Institute of Policy Studies, Lee Kuan Yew School of Public Policy, 2013.
- Malone-Lee, L C, Water management concepts and implementation in Singapore, *International Conference on Integrated Resource Management in Asian cities: the urban Nexus*, German Cooperation (Deutsche Zusammenarbeit), GIZ (Deutsche Gesellschaft for International Zusammenarbeit) and United Nations ESCAP, 2013.
- Malone-Lee, LC, The Future of High Density Cities: Everyone Harvests, *World Economic Forum: Annual Meeting of the New Champions*, Dalian, Peoples Republic of China, 2013
- Malone-Lee L C, "Biodiversity and Human Wellbeing: An Urban Planning Perspective". *2nd International Conference on Biodiversity and the UN Millennium Development Goals: "Biodiversity and Health"*, Leibniz Institute of Ecological Urban and Regional Development (IOER), jointly with the Institute Ecologie et Environment-Centre National de la Recherche Scientifique (InEE-CNRS) France and the German National Academy of Sciences Leopoldina, Berlin, Germany, (invited keynote presentation) 2013.
- Woo, P W S and L C Malone Lee, "Assessing Skywalk Systems as a Response to High Density Living in Hong Kong". *The 11th International Congress of the Association of Planning Schools of Asia*, University of Tokyo, Tokyo, Japan, 2013.
- Hii, D J C, C K Heng, L C Malone-Lee, Zhang, J, Y C Huang, N Ibrahim, P H T Janssen, "Preliminary Evaluation of A Daylight Performance Indicator for Urban Analysis: Facade Vertical Daylight Factor per Unit Floor Area". *SimBuild 2012 Conference*, Madison Wisconsin, USA, 2013.
- Malone-Lee, L C, Wellbeing in the context of High Density Living: An Urban Planning Perspective. *The Regional Office for Asia and the Pacific (ROAP) of the International Council for Science (ICSU Conference)*, Kuala Lumpur, 2013.
- Malone-Lee, L C, Choosing Density, Adapting Density, *Future Cities: Technology, Society and Agencies of Change, 11th Dialogue on Science*, Engelberg, Switzerland, 2012 (invited presentation)
- Malone-Lee, L C, S. Srinivasan and V. Kushwaha, An Assessment Framework for Evaluating Cities' Climate Change Adaptation through Urban Planning, *Resilient Cities 2012: 3rd World Congress on Cities and Adaptation to Climate Change*, Bonn, Germany 2012.
- Malone-Lee, L C, Reese, M A and Heng, C K, Culture and Sustainability: Exploring the Nexus in the Context of Globalizing Asian Cities, *National Policy Forum On Creative Industries*, Brunei Darussalam, Brunei, 2012.
- Malone-Lee, L C and Ho, K C, The Neighborhood in Dense Singapore: Compact, Convenient and Community. *Planetary Urbanization: Comparative Perspectives*, ETH-Singapore, Futures City Laboratory (invited presentation), 2012
- Malone-Lee, L C, Heng, C K and Reese, M A, An Assessment Framework for Monitoring Cities' Sustainability. *UN-Habitat: the 6th Session of the World Urban Forum – the Urban Future*, Naples, Italy, 2012 (by invitation).
- Malone-Lee, LC and A R Hamid, Benchmarking Biodiversity in the City: Proposed Framework for a multi-dimensional approach in the context of sustainable urban growth. *4th International Eco Summit: Ecological Sustainability, Restoring the Planet's ecosystem services*, Columbus, Ohio, (invited presentation) 2012.
- Malone-Lee, L C, Urban Food, Energy, and Water Nexus: Its implications for Urban Planning and Management in Asian Cities. *Inaugural NUS Global Asia Institute Signature Conference. Asian Cities - Urban Food, Energy, and Water Security in the face of Population Growth and Climate Change*, Singapore, invited presentation, 2012.
- Malone-Lee, L C, "Sustainability Challenges for Island States: Singapore Sustainability in terms of waste and water", international expert group workshop on *Island Industrial Ecology and Sustainability*, at Kona, Hawaii, organized by Yale University and supported by a Japan Foundation, January 2011 (invited participation)
- Hii, D J C, C K Heng, L C Malone Lee, J Zhang, Y C Huang, N Ibrahim, and P H T Janssen, "Solar Radiation

- Performance Evaluation for High Density Urban Forms in the Tropical Context". Building Simulation 2011 Conference, Sydney, Australia, 2011.
- Kushwaha, V, L C Malone Lee and C K Heng, "An Assessment Framework for Sustainable Water Resource and Infrastructure Planning: the case study of Singapore". *The 11th International Congress of the Association of Planning Schools of Asia*, Tokyo, 2011.
- Hii, D J C, C K Heng, L C Malone Lee and J Zhang, "Analyzing the Ventilation Performance of Tropical High Density Residential Precincts using Computational Fluid Dynamics". *14th International Conference on Computer Aided Architectural Design futures*, Liege, Belgium, 2011.
- Malone Lee, L C, "Eco efficient water management in Singapore", *Inter-regional Seminar on Eco efficient and Sustainable Infrastructure in Asia and Latin America* (invited presentation), Santiago de Chile, Chile), organized by the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and the United Nations Economic Commission for Latin America and the Caribbean, 2011 (invited presentation).
- Abdul Hamid, A R, L C Malone Lee and C K Heng, "Benchmarking Biodiversity: Developing the Conceptual Framework for Evaluation using the Delphi Technique". *The 11th International Congress of the Association of Planning Schools of Asia*, University of Tokyo, Tokyo, Japan, 2011.
- Malone Lee, L C, S Sathyanarayanan, K Vaishali And C K Heng, "Evaluating the Transport Pollution Energy Nexus using the DPSIR framework: The case study of Singapore". *The 11th International Congress of the Association of Planning Schools of Asia*, University of Tokyo, Tokyo, Japan, 2011.
- Malone Lee, L C, "'Water for all: conserve, value, enjoy', Singapore Case Study". *Fifth Asia Pacific Urban Forum (APUF 5)*, Bangkok, Thailand, organized by United Nations Economic Commission for Asia and the Pacific (ESCAP) and partner organizations, (invited presentation), 2011.
- Wang, J, C K Heng and L C Malone Lee, "Path dependency, planning regime for sustainable development in Asian cities: A study of Singapore for Sustainable Development". *17th Annual International Sustainable Development Research Conference*, University of Columbia, New York, United States, 2011.
- Zhang, J, C K Heng, J C D Hii, H T J P. Janssen, L C Malone-Lee and B K Tan, "Evaluating the Environmental Implications of Density : A comparative case study on the relationship between density, urban block typology and Sky View Factor performance" in eCAADe: Education and Research in Computer-aided design in Europe, 2010, ETH, Zurich, Switzerland.
- Malone-Lee, L C, "Sustainable Cities: the critical discourse", *International Research Conference on Sustainable Green Intelligent Innovative Island*, Feb 2010, University of Mauritius, Mauritius. (Keynote Address).
- Malone-Lee, L C, "Tall Tales of Asian Cities", in *Leergang 15 "High Rise in the Sustainable City"*, Apr 2010, TU Delft, Netherlands. (Invited Presentation).
- Malone-Lee, L C, "Sustainability and Land Use Planning: exploring the common good, the conflicts and pragmatics", Research Seminar, *Constructing Sustainability- Ethics, Techniques or Aesthetics*, Asia Research Institute, National University of Singapore, Singapore, 2010.
- Malone Lee, L C, "Evaluating Eco Efficient Water Infrastructure Development: The Case Study Of Singapore's "ABC Waters" Programme". *World City Water Forum 2009: Second Regional Workshop on Development of Eco Efficient Water Infrastructure in Asia and the Pacific*, Incheon, South Korea), organised by the United Nations Economic Commission for Asia and the Pacific (ESCAP), 2009.
- Malone-Lee, L C, "Planning for Climate Change in resource-constrained economies", *City Futures '09: an International Conference on Globalism and Urban Change*, June 2009, Instituto de Formación y Estudios del Gobierno Local de Madrid, Spain.
- Malone Lee, L C and Y L Chua, "Land Use Planning and the Environment". *Singapore Futures: Scenarios for the Next Generation*. Singapore: Institute of Policy Studies, Lee Kuan Yew School of Public Policy, 2008 (invited presentation).
- Malone-Lee, L C, "Promoting urban fringes and functional re-centralisation as a sustainable spatial planning strategy for growing cities", *ENHR International Conference on Sustainable Urban Areas*, April 2007, Rotterdam, Netherlands.
- Malone-Lee, L C, "Familiar Places as a model for sustainable neighbourhoods", *Urban Affairs Association 36th Meeting "Neighbourhoods and Urban Transformation: the New Global Context"*, Apr 2006, Montreal, Canada.
- Malone-Lee, L C, "The sustainability discourse in land use planning: seeking rationality when it is a case of muddling through", in *Association of Collegiate Schools of Planning Annual Conference*, Oct 2005,

Kansas City, United States.

Malone-Lee, L C, " The twinning strategy: integrating new towns with familiar places as an alternative planning strategy for Asian cities", *Asian Mega cities and global sustainability: International Conference on Science and Technology in Sustainability 2004* (Invited Presentation), Nov 2004, Science Council of Japan, Tokyo, Japan.

PUBLIC SERVICE

- Consultant, Urban Redevelopment Authority “[How to build long-term land capacity for Singapore”, 2012-2013
- Executive Committee Member, Urban Land Institute, ULI South Asia Chapter. (2011-2013)
- Faculty Lead, in the “Leaders in Urban Governance” Programme (LUGP), Centre for Liveable Cities (CLC), in collaboration with the Civil Service College (2011)
- Member, Rail Corridor Partnership (2012) under the auspices of the Ministry of National Development, Singapore
- Member, Policy Study Group on Physical and Environmental Sustainability, Ministry of Community Development, Youth and Sports (2007 to 2009)
- Chair, Focus Group on Review on Landed Housing in Singapore, Urban Redevelopment Authority, Ministry of National Development (2007 – 2008)
- Member of the Sports Facilities Planning Advisory Committee (to advise on the preparation of the Sports Master Plan), appointed by the Chairman, Singapore Sports Council (2003 – 2005)
- Planning Appeals Inspector, appointed by the Minister for National Development under Section 17 of the Planning Act to review development appeals (1992 to 1998), re-appointed 2002 for appeals against the new Singapore Master Plan.
- Advisory Panel Member, JTC Corporation, to review industrial development policies and processes in Singapore (2001 to 2002)
- Member, Concept Plan 2001 Focus Group, appointed by the Minister for National Development to review Singapore’s Strategic Plan, Chair of the sub-committee on Work Space Projection for development of the commercial and financial sectors.
- Member, Planning and Design Advisory Committee for the Redevelopment of Orchard Road, Singapore Tourism Board (1999 to 2000)
- Jury Member, Sembawang Environment Competition for Tertiary Institutions in Singapore (2004 to 2014).
- Jury member, The Singapore Challenge, The Global Young Scientists Summit (GYSS), National Research Foundation, 2013.
- Chair, Jury Panel on Rail Corridor Ideas Competition for “Community Ownership, Pride and Sense of Wellbeing” (2012)
- Member of the Assessment Committee for the Research Excellence Awards to Outstanding Young Academics, University of Mauritius (2010)
- Member, Jury Panel, EU Centre (Singapore) competition on “Green Innovations: Our Future Together (2009)

HONOURS AND AWARDS

- Conferred The Commendation Medal (Pingat Kepujian) in the 2013 National Day Awards
- Awarded the Japan Association for Social Informatics for “Excellent Graduate Thesis” (1998)
- Awarded the JSPS Gold Medal (1997)
- Awarded the RONPAKU Scholarship by the Japan Society for Promotion of Science (JSPS) for PhD studies at the Tokyo Institute of Technology (1992)
- Awarded Colombo Plan Scholarship for post graduate course in Town Planning in Sydney University, Australia (1980 – 1982)