

Winston Tseon Loong CHOW (周祥龙)winstonchow@smu.edu.sg**Mailing Address**

College of Integrative Studies
Singapore Management University
10 Canning Rise, Singapore 179873

Office Address

Yong Pung How School of Law, Rm 4.15
Singapore Management University
55 Armenian St, Singapore 179943

Education

- **Doctor of Philosophy (2011)** School of Geographical Sciences and Urban Planning, Arizona State University
- **Master of Social Sciences (2005)** Geography, National University of Singapore
- **Bachelor of Social Sciences (First Class Honours) (2002)** Geography, National University of Singapore
- **Bachelor of Arts (with Merit) (2001)** English Literature and Geography, National University of Singapore

Employment Experience

- **Associate Professor of Urban Climate (Tenured)**
College of Integrative Studies, Singapore Management University [Jul 2019 -]
- **Assistant Professor of Geography (Tenure-Track)**
Department of Geography, National University of Singapore [Aug 2013-Jun 2019]
Adjunct appointment as Honorary Assistant Professor, Institute of Water Policy, Lee Kuan Yew School of Public Policy, National University of Singapore [Apr 2016-Jun 2019]
- **Research Fellow & Postdoctoral Research Associate**
Department of Engineering, College of Technology and Innovation, Arizona State University; Concurrent appointment with Department of Geography, National University of Singapore [Jun 2011-Aug 2013]

Major Research Interests

- Urban vulnerability and risk to climate change
- Urban heat island science, impacts, and mitigation
- Sustainability in urban climatology

Local and International Awards and Invitations

- Lee Kong Chian Research Fellow, Singapore Management University (2022-2023)
- Invited Lead Author, Intergovernmental Panel on Climate Change (IPCC), Working Group II 6th Assessment Report (AR6) on Climate Change
 - Chapter 6 “Cities, Settlements and Key Infrastructure”
 - Cross Chapter Paper 2 “Cities and Settlements by the Sea”

- National University of Singapore Faculty of Arts and Social Sciences Promising Researcher Award (2016/2017)

Consultation experience and commissioned projects (with governmental agencies and industry)

- Instructor, Sustainability and Climate Change, Singapore Management University Executive Development Programme
- Adjunct fellow, Centre for Liveable Cities (Singapore), for Climate Resilience project (Cambridge Road), 2019-2022
- Scientific Reviewer, AECOM (Singapore), “Climate Change Study Report: Development of Soil and Groundwater Local Standards”, 2021-2022
- Invited Member, IPCC Task Group on Data Support for Climate Change Assessments (TG-Data), 2019-2023
- Invited Scoping Expert, IPCC AR6 Synthesis Report (Singapore, Singapore), October 2019
- Invited Scoping Expert, IPCC AR6 Report (Addis Ababa, Ethiopia), May 2017
- Governmental Delegate for Singapore, travel to IPCC-46 (Montreal, Canada; 2017), IPCC-48 (Incheon, Seoul; 2018), and IPCC-51 (Monaco, Monaco; 2019)

Awarded research grants

- **Cooling Singapore 2.0: Urban Climate Risks** Funding agency: National Research Foundation; 3 years; Oct 2022 – Sep 2025; Lead Principal Investigator.
- **Cooling Singapore 2.0: Digital Urban Climate Twin** Funding agency: National Research Foundation; 3 years; Sep 2020 – Aug 2023; Co-Lead Principal Investigator.
- **Environmental perception in Mandai Parks** Funding agency: Mandai Park Development Pte. Ltd; 3 years; July 2019 – July 2023; Principal Investigator.
- **Cooling Singapore 1.5: Virtual Singapore Urban Climate Design** Funding agency: National Research Foundation; 1.5 years; April 2019 – Sep 2020; Co-Principal Investigator.
- **Cooling Singapore** Funding agency: National Research Foundation; 2 years; Jan 2017 – Dec 2018; Co-Principal Investigator.
- **Creating Cooler Parks in the Future** Funding agency: National Parks Board; 2.25 years; Dec 2016 – Feb 2019; Principal Investigator.
- **Investigating the Resilience of Singapore’s Water Supply to Meteorological Drought** Funding agency: Institute of Water Policy, National University of Singapore; 1 year; Aug 2016 – Jul 2017; Principal Investigator.
- **Evaluating the Thermal Regulation of Singapore’s Urban Green Spaces: a Multi-method Investigation** Funding Agency: Humanities and Social Sciences Seed Fund, National University of Singapore; 1.5 years; Jul 2016 – Jan 2018; Principal Investigator.
- **Three-dimensional observation and modelling of small-scale urban climates in Singapore** Funding Agency: Faculty of Arts and Social Sciences, National University of Singapore; 3 years; Aug 2013 – Jul 2016; Principal Investigator.

Past and current professional leadership appointments in Singapore Management University

- Faculty Senate member, Singapore Management University (2022-)
- Co-Director, Deferred Declaration of Degree Programme, College of Integrative Studies (2022-)
- Advisory Committee Member, [RED&BLUE: Real Estate Development & Building in Low Urban Environments](#), Delft University of Technology (2022-)
- Advisory board member, [Melbourne Centre for Cities](#), University of Melbourne (2022-)
- Basket Co-ordinator, Technology and Society, Singapore Management University (2019 –2021)
- Undergraduate Curriculum Committee member, Singapore Management University (2019 – 2022)
- Principal investigator, Cooling Singapore 2.0 lab, Singapore Management University (2019 – to date)
- Prinsep Street Residences Refresh Task and Finish Group. Convened by SMU Provost (Member, 2019-2020)
- Chair, Teaching Review and Excellence Committee, Office of Core Curriculum (2019-2020)
- Academic advisor, SMU City Dialogues “Inspiring Solutions: Growing Green” 24-25 October 2019.
- Brown Bag Organising Committee, School of Social Sciences and Office of Core Curriculum (Co-organiser, 2019-2020)
- Associate Editor, [Climate Risk Management](#) (2021 -)
- Editorial Board Member, [Landscape and Urban Planning \(2019 -\)](#) and [PLOS One Sustainability and Transformation \(2021 -\)](#)
- Guest Editor, [Environmental Research Letters Special Issue on Sustainable Cities: Urban Solutions Toward Desired Outcomes \(2019/2021\)](#)
- Co-Editor-in-Chief, [World Scientific Book Series on Extreme Events](#)
- Invited Member, Advisory Committee, SG Eco Fund, Ministry of Sustainability and the Environment (Nov 2020 – Nov 2023)
- Invited Member, Environment and Resources Standards Committee, Enterprise Singapore (Aug 2020 –Jul 2023)

Classes Taught in Singapore Management University

COR2203 Climate Change: Global and Local Solutions (Undergraduate)

COR2210 Technological Innovations enhancing Urban Sustainability (SMU-X)

Research and Summary Publications (Peer Reviewed)

[Google Scholar profile](#): 3165 total citations; h-index of 27

[Scopus Profile \(2017-2022\)](#): Field-Weighted Citation Impact of 3.09; h-index of 24

2022

1. Adelekan, I., A. Cartwright, **W.T.L. Chow**, S. Colenbrander, R. Dawson, M. Garschagen, M. Haasnoot, M. Hashizume, I. Klaus, J. Krishnaswamy, M.F. Lemos, D. Ley, T. McPhearson, M. Pelling, P.P. Kodira, A. Revi, L.M. Sara, N.P. Simpson C. Singh, W. Solecki, A. Thomas, and C. Trisos. 2022: *The Summary for Urban Policymakers (SUP) Volume II: What the latest science on impacts, adaptation and vulnerability means for cities and urban areas*. Indian Institute for Human Settlements. <https://doi.org/10.24943/SUPSV209.2022> (Open Access)
2. Banerjee, S., G.N.Y Ching, S. K. Yik, Dzyuban, Y., P. J. Crank, R.X.Y. Pek, and **W.T.L. Chow**. 2022: "Analysing impacts of urban morphological variables and density on outdoor microclimate for tropical cities: A review and a framework proposal for future research directions" *Building and Environment*, 225, 109646. [DOI:10.1016/j.buildenv.2022.109646](https://doi.org/10.1016/j.buildenv.2022.109646). (Open Access)
3. Gillerot, L., D. Landuyt, R. Oh, **W.T.L. Chow**, D. Haluza, Q. Ponette, H. Jactel, H. Bruelheide, B. Jaroszewicz, M. Scherer-Lorenzen, and P. De Frenne. 2022: "Forest structure and composition alleviate human thermal stress." *Global Change Biology*, [DOI:10.1111/gcb.16419](https://doi.org/10.1111/gcb.16419)
4. Lipson, M., C.S.B. Grimmond, M. Best, **W.T.L. Chow**, A. Christen, N. Chrysoulakis, A. Coutts, B. Crawford, S. Earl, J. Evans, K. Fortuniak, B.G. Heusinkveld, J-W. Hong, J. Hong, L. Järvi, S. Jo, Y-H. Kim, S. Kotthaus, K. Lee, V. Masson, J.P. McFadden, O. Michels, W. Pawlak, M. Roth, H. Sugawara, N. Tapper, E. Velasco, and H.C. Ward. 2022: "Harmonized gap-filled datasets from 20 urban flux tower sites." *Earth System Science Data*. 14, 5157–5178 [DOI: 10.5194/essd-14-5157-2022](https://doi.org/10.5194/essd-14-5157-2022) (Open Access)
5. Nazarian, N., E. S. Krayenhoff, B. Bechtel, D. Hondula, R. Paolini, J. Vanos, T. Cheung, **W. T. L. Chow**, R. de Dear, O. Jay, J. K. W. Lee, A. Martilli, A. Middel, L. K. Norford, M. Sadeghi, S. Schiavon, and M. Santamouris. 2022: "Integrated Assessment of Urban Overheating Impacts on Human Life." *Earth's Future*, 10:8, e2022EF002682. [DOI:10.1029/2022EF002682](https://doi.org/10.1029/2022EF002682) (Open Access)
6. Dzyuban, Y., G.N.Y Ching, S. K. Yik, A. J. Tan, P. J. Crank, S. Banerjee, R.X.Y. Pek, and **W.T.L. Chow**. 2022: "Sentiment analysis of weather-related Tweets from cities within hot climates." *Weather, Climate and Society*. 14(4) 1133-1145. [DOI: 10.1175/WCAS-D-21-0159.1](https://doi.org/10.1175/WCAS-D-21-0159.1). (Open Access)
7. Dzyuban, Y., G.N. Ching, S.K. Yik, A.J. Tan, S. Banerjee, P.J. Crank, and **W.T.L. Chow**. 2022: "Outdoor thermal comfort research in transient conditions: A

narrative literature review.” *Landscape and Urban Planning*, 226, 104496.

[DOI:10.1016/j.landurbplan.2022.104496](https://doi.org/10.1016/j.landurbplan.2022.104496) (Open Access)

8. Pörtner, H.-O., D.C. Roberts, H. Adams, I. Adelekan, C. Adler, R. Adrian, P. Aldunce, E. Ali, R. Ara Begum, B. Bednar-Friedl, R. Bezner Kerr, R. Biesbroek, J. Birkmann, K. Bowen, M.A. Caretta, J. Carnicer, E. Castellanos, T.S. Cheong, **W.T.L. Chow**, G. Cissé, S. Clayton, A. Constable, S. Cooley, M.J. Costello, M. Craig, W. Cramer, R. Dawson, D. Dodman, J. Efitre, M. Garschagen, E.A. Gilmore, B. Glavovic, D. Gutzler, M. Haasnoot, S. Harper, T. Hasegawa, B. Hayward, J.A. Hicke, Y. Hirabayashi, C. Huang, K. Kalaba, W. Kiessling, A. Kitoh, R. Lasco, J. Lawrence, M.F. Lemos, R. Lempert, C. Lennard, D. Ley, T. Lissner, Q. Liu, E. Liwenga, S. Lluch-Cota, S. Löschke, S. Lucatello, Y. Luo, B. Mackey, K. Mintenbeck, A. Mirzabaev, V. Möller, M. Moncassim Vale, M.D. Morecroft, L. Mortsch, A. Mukherji, T. Mustonen, M. Mycoo, J. Nalau, M. New, A. Okem, J.P. Ometto, B. O’Neill, R. Pandey, C. Parmesan, M. Pelling, P.F. Pinho, J. Pinnegar, E.S. Poloczanska, A. Prakash, B. Preston, M.-F. Racault, D. Reckien, A. Revi, S.K. Rose, E.L.F. Schipper, D.N. Schmidt, D. Schoeman, R. Shaw, N.P. Simpson, C. Singh, W. Solecki, L. Stringer, E. Totin, C.H. Trisos, Y. Trisurat, M. van Aalst, D. Viner, M. Wairu, R. Warren, P. Wester, D. Wrathall, and Z. Zaiton Ibrahim. 2022: Technical Summary. [H.-O. Pörtner, D.C. Roberts, E.S. Poloczanska, K. Mintenbeck, M. Tignor, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem (eds.)]. “Technical Summary” In: *Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 37-118, [DOI:10.1017/9781009325844.002](https://doi.org/10.1017/9781009325844.002).
9. Dodman, D., B. Hayward, M. Pelling, V. Castan Broto, **W.T.L. Chow**, E. Chu, R. Dawson, L. Khirfan, T. McPhearson, A. Prakash, Y. Zheng, and G. Ziervogel. 2022: “Cities, Settlements and Key Infrastructure.” In: *Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 907- 1040, [DOI:10.1017/9781009325844.008](https://doi.org/10.1017/9781009325844.008).
10. Glavovic, B., R. Dawson, **W.T.L. Chow**, M. Garschagen, M. Haasnoot, C. Singh, and A. Thomas. 2022: “Cross-Chapter Paper 2: Cities and Settlements by the Sea.” In: *Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press. Cambridge University Press,

Cambridge, UK and New York, NY, USA, pp. 2163-2194,
[DOI:10.1017/9781009325844.019](https://doi.org/10.1017/9781009325844.019).

2021

11. Georgescu, M., M. Arabi, **W. T. L. Chow**, E. Mack, and K. C. Seto. 2021: "Focus on sustainable cities: urban solutions toward desired outcomes." *Environmental Research Letters*, 16, 12. [DOI:10.1088/1748-9326/ac37d1](https://doi.org/10.1088/1748-9326/ac37d1) (Open Access)
12. Pelling, M., **W.T.L. Chow**, E. Chu, R. Dawson, D. Dodman, A. Fraser, B. Hayward, L. Khirfan, T. McPhearson, A. Prakash, and G. Ziervogel. 2021: "A climate resilience research renewal agenda: learning lessons from the COVID-19 pandemic for urban climate resilience." *Climate and Development*. [DOI:10.1080/17565529.2021.1956411](https://doi.org/10.1080/17565529.2021.1956411) (Open Access)
13. Ossola, A., G.D. Jenerette, A. McGrath, **W.T.L. Chow**, L. Hughes, and M.R. Leishman. 2021: "Small vegetated patches greatly reduce urban surface temperature during a summer heatwave in Adelaide, Australia." *Landscape and Urban Planning*, 209, p.104046. [DOI: 10.1016/j.landurbplan.2021.104046](https://doi.org/10.1016/j.landurbplan.2021.104046)
14. Bhardwaj, A., R.J. Wasson, **W.T.L. Chow**, and A.D. Ziegler. 2021: "High-intensity monsoon rainfall variability and its attributes: a case study for Upper Ganges Catchment in the Indian Himalaya during 1901–2013". *Natural Hazards*. [DOI:10.1007/s11069-020-04431-9](https://doi.org/10.1007/s11069-020-04431-9)

2020

15. Meili, N., G. Manoli, P. Burlando, J. Carmeliet, **W.T.L. Chow**, A.M. Coutts, M. Roth, E., Velasco, E.R. Vivoni, and S. Fatichi. 2020: "Tree effects on urban microclimate: diurnal, seasonal, and climatic temperature differences explained by separating radiation, evapotranspiration, and roughness effects" *Urban Forestry & Urban Greening*. [DOI: 10.1016/j.ufug.2020.126970](https://doi.org/10.1016/j.ufug.2020.126970) (Open Access)
16. Nazarian, N., S. Liu, M. Kohler, J.K.W. Lee, C. Miller, **W.T.L. Chow**, S.B.B. Alhadad, A. Martilli, M. Quintana, L. Sunden, and L. Norford, 2020: "Project Coolbit: Can your watch predict heat stress and thermal comfort sensation?" *Environmental Research Letters*. [DOI: 10.1088/1748-9326/abd130](https://doi.org/10.1088/1748-9326/abd130) (Open Access)
17. Martilli, A., M. Roth, **W.T.L. Chow**, M. Demuzere, M. Lipson, E.S. Krayenhoff, D.J. Sailor, N. Nazarian, J.A. Voogt, H. Wouters, A. Middel, I.D. Stewart, B. Bechtel, A. Christen, and M.A. Hart, 2020: "Summer average urban-rural surface temperature differences do not indicate the need for urban heat reduction." *OSF Preprints* [DOI:10.31219/osf.io/8gnbf](https://doi.org/10.31219/osf.io/8gnbf) (Open Access)
18. Wang, J. W., **W.T.L. Chow**, and Y.C. Wang. 2020: "A global regression method for thermal sharpening of urban land surface temperatures from MODIS and

Landsat." *International Journal of Remote Sensing*, 41(8), 2986-3009.
[DOI:10.1080/01431161.2019.1697009](https://doi.org/10.1080/01431161.2019.1697009)

2019

19. Meili, N., G. Manoli, P. Burlando, , E. Bou-Zeid, **W.T.L. Chow**, A.M. Coutts, E. Daly, K.A. Nice, M. Roth, N.J. Tapper, E. Velasco, E.R. Vivoni, and S. Fatichi. 2019: "An urban ecohydrological model to quantify the effect of vegetation on urban climate and hydrology (UT&C v1.0)". *Geoscientific Model Development*, 13 (1), 335-362. [DOI: 10.5194/gmd-2019-225](https://doi.org/10.5194/gmd-2019-225)
20. Heng, S.L., and **W.T.L. Chow**. 2019: "How 'hot' is too hot? Evaluating acceptable outdoor thermal comfort ranges in an equatorial urban park" *International Journal of Biometeorology*. 63(6): 801-816. [DOI: 10.1007/s00484-019-01694-1](https://doi.org/10.1007/s00484-019-01694-1) (Open Access)
21. Bhardwaj, A., R.J. Wasson, A.D. Ziegler, **W.T.L. Chow**, and Y.P. Sundriyal. 2019: "Characteristics of rain-induced landslides in the Indian Himalaya: a case study of the Mandakini Catchment during the 2013 flood" *Geomorphology*, 330:100-115. [DOI: 10.1016/j.geomorph.2019.01.010](https://doi.org/10.1016/j.geomorph.2019.01.010)

2018

22. **Chow, W.T.L.** 2018: "The impact of weather extremes on urban resilience to hydro-climate hazards: a Singapore case study" *International Journal of Water Resources Development*. 34 (4): 510-524. [DOI:10.1080/07900627.2017.1335186](https://doi.org/10.1080/07900627.2017.1335186) (Open Access)
23. C.J Chuah, B. H. Ho, and **W.T.L. Chow**. 2018: "Trans-boundary variations of urban drought vulnerability and its impact on water resource management in Singapore and Johor, Malaysia" *Environmental Research Letters*. 13(7): 074011 (15 Pages) [DOI: 10.1088/1748-9326/aacad8](https://doi.org/10.1088/1748-9326/aacad8) (Open Access)
24. Wang, Y-C., B.K.H. Hu, S.W. Myint, C-C Feng, **W.T.L. Chow**, and P.F. Passy. 2018: "Patterns of land change and their potential impacts on land surface temperature change in Yangon, Myanmar" *Science of The Total Environment*. 643:738-750. [DOI: 10.1016/j.scitotenv.2018.06.209](https://doi.org/10.1016/j.scitotenv.2018.06.209).

2017

25. Bhardwaj, A., A.D. Ziegler, R.J. Wasson, and **W.T.L. Chow**. 2017: "Accuracy of rainfall estimates at high altitude in the Garhwal Himalaya (India): a comparison of secondary precipitation products and station rainfall measurements" *Atmospheric Research*. 188:30-38. [DOI:10.1016/j.atmosres.2017.01.005](https://doi.org/10.1016/j.atmosres.2017.01.005)

2016

26. **Chow, W.T.L.**, S.N.A. Ali Akbar, S.L. Heng, and M. Roth. 2016: "Assessment of measured and perceived microclimates within a tropical urban forest." *Urban Forestry & Urban Greening*. 16:62-75. [DOI:10.1016/j.ufug.2016.01.010](https://doi.org/10.1016/j.ufug.2016.01.010). (Open Access).
27. **Chow, W.T.L.**, B.D. Cheong, and B.H Ho. 2016: "A Multimethod Approach towards Assessing Urban Flood Patterns and Its Associated Vulnerabilities in Singapore." *Advances in Meteorology*. 2016: 7159132 (11 pages). [DOI:10.1155/2016/7159132](https://doi.org/10.1155/2016/7159132). (Open Access).
28. Kaplan, S., C.S. Galletti, **W.T.L. Chow**, and S.W. Myint. 2016: "First order approximation of Broadband Directional Albedo with High Resolution Quickbird Imagery: a case study for arid urban areas." *GIScience & Remote Sensing*. 53(3):303-319. [DOI:10.1080/15481603.2016.1153944](https://doi.org/10.1080/15481603.2016.1153944).
29. Alexander, P.J., B. Bechtel, **W.T.L. Chow**, R. Fealy, and G Mills. 2016: "Linking urban climate classification with an urban energy and water budget model: Multi-site and multi-seasonal evaluation." *Urban Climate*. 17:196-215. [DOI:10.1016/j.uclim.2016.08.003](https://doi.org/10.1016/j.uclim.2016.08.003).
30. Ziegler, A.D., S.I. Cantarero, R.J Wasson, P. Srivastava, S. Spalzin, **W.T.L. Chow**, and M.J. Gillen. 2016: "A Clear and Present Danger: Ladakh's increasing vulnerability to flash floods and debris flows" *Hydrological Processes*. 30:4214-4223. [DOI: 10.1002/hyp.10919](https://doi.org/10.1002/hyp.10919).
31. Gober, P., D.A. Sampson, R. Quay, D.D. White, and **W.T.L. Chow**. 2016. "Urban adaptation to mega-drought: Anticipatory water modeling, policy, and planning for the urban Southwest" *Sustainable Cities and Society*. 27:497-504. [DOI:10.1016/j.scs.2016.05.001](https://doi.org/10.1016/j.scs.2016.05.001)

2015

32. Georgescu, M., **W.T.L. Chow**, Z. Wang, A.J. Brazel, M. Roth, and V. Benson-Lira. 2015: "Prioritizing urban sustainability solutions: coordinated approaches must incorporate scale-dependent built environment induced effects." *Environmental Research Letters*. 10 (6): 061001. [DOI:10.1088/1748-9326/10/6/061001](https://doi.org/10.1088/1748-9326/10/6/061001) (Open Access).
33. Shaffer, S.R., **W.T.L. Chow**, M. Georgescu, P. Hyde, G.D. Jenerette, A. Mahalov, M. Moustauoui, and B.L. Ruddell. 2015: "Multiscale modeling and evaluation of urban surface energy balance in the Phoenix metropolitan area." *Journal of Applied Meteorology and Climatology*. 54: 322-338. [DOI:10.1175/JAMC-D-14-0051.1](https://doi.org/10.1175/JAMC-D-14-0051.1) (Open Access)

34. Ruddell, D.M., A.J. Brazel, **W.T.L. Chow**, and A. Middell. 2015: "The Urban Heat Island Effect and Sustainability Science: Causes, Impacts, and Solutions" in K. D. Pijawka (ed.) *Sustainability for the 21st Century: Pathways, Programs, and Policies*: 219-234. Kendall Hunt: Iowa. ISBN: 978-1-4652-6671-2

2014

35. **Chow, W.T.L.**, F.S. Salamanca, M. Georgescu, A. Mahalov, J.S. Milne, and B.L. Ruddell. 2014: "A multi-method and multi-scale approach for estimating city-wide anthropogenic heat fluxes" *Atmospheric Environment*. 99: 64-76. [DOI:10.1016/j.atmosenv.2014.09.053](https://doi.org/10.1016/j.atmosenv.2014.09.053). (Open Access).
36. **Chow, W.T.L.**, T.J. Volo, E.R. Vivoni, G.D. Jenerette, and B.L. Ruddell. 2014: "Seasonal dynamics of a suburban energy balance in Phoenix, Arizona" *International Journal of Climatology*. 34(15): 3863-3880. [DOI: 10.1002/joc.3947](https://doi.org/10.1002/joc.3947).
37. Ziegler, A.D., J.P. Terry, G.J.H. Oliver, D.A. Friess, J. Chuah, **W.T.L. Chow**, and R.J. Wasson. 2014: "Increasing Singapore's resilience to drought" *Hydrological Processes*. 28(15): 4543-4548. [DOI: 10.1002/hyp.10212](https://doi.org/10.1002/hyp.10212).

2013

38. Chuang, W-C., P. Gober, **W.T.L. Chow**, and J. Golden. 2013: "Sensitivity to heat: A comparative study of Phoenix, Arizona and Chicago, Illinois (2003-2006)" *Urban Climate*. 5:1-18. [DOI: 10.1016/j.uclim.2013.07.003](https://doi.org/10.1016/j.uclim.2013.07.003).
39. Deplet-Barreto, J., C.A. Martin, A.J. Brazel, **W.T.L. Chow**, and S.L. Harlan. 2013: "Creating the park cool island in an arid city urban neighborhood: vegetation and extreme heat in Phoenix, Arizona." *Urban Ecosystems*. 16: 617-635. [DOI:1007/s11252-012-0278-8](https://doi.org/10.1007/s11252-012-0278-8)
40. Connors, J.P., C.S. Galletti, and **W.T.L. Chow**. 2013: "Landscape configuration and urban heat island effects: assessing the relationship between landscape characteristics and land surface temperature in Phoenix, Arizona." *Landscape Ecology*. 28(2): 271-283. [DOI: 10.1007/s10980-012-9833-1](https://doi.org/10.1007/s10980-012-9833-1).

2012

41. **Chow, W.T.L.**, D. Brennan, and A.J. Brazel. 2012: "Urban heat island research in Phoenix, Arizona: theoretical contributions and policy applications." *Bulletin of the American Meteorological Society*. 93(4): 517-530. [DOI: 10.1175/BAMS-D-11-00011.1](https://doi.org/10.1175/BAMS-D-11-00011.1). (Open Access)
42. **Chow, W.T.L.**, W-C Chuang, and P. Gober. 2012: "Vulnerability to extreme heat in metropolitan Phoenix: Spatial, temporal and demographic dimensions." *The Professional Geographer*. 64(2): 286-302. [DOI:10.1080/00330124.2011.600225](https://doi.org/10.1080/00330124.2011.600225).

43. **Chow, W.T.L.** and A.J. Brazel. 2012: "Assessing xeriscaping as a sustainable heat island mitigation approach for a desert city." *Building and Environment*, 47: 170-181. [DOI:10.1016/j.buildenv.2011.07.027](https://doi.org/10.1016/j.buildenv.2011.07.027).
44. Roth, M. and **W.T.L. Chow**. 2012: "A historical review and assessment of urban heat island in Singapore." *Singapore Journal of Tropical Geography*. 33(3): 381-397. [DOI:10.1111/sjtg.12003](https://doi.org/10.1111/sjtg.12003).
45. Ruddell, D.M., A.J. Brazel, and **W.T.L. Chow**. 2012: "The Urban Heat Island Effect and Sustainability Science: Causes, Impacts, and Potential Solutions" in K. D. Pijawka and M. Gromulat (eds.) *Understanding Sustainable Cities: Concepts, Cases, and Solutions*: 167-183. Kendall Hunt: Iowa. ISBN: 978-1-4652-0344-1.
46. **Chow, W.T.L.** and B.M. Svoma. 2011: "Analyses of nocturnal temperature cooling rate response to historical local-scale urban land-use/land cover change" *Journal of Applied Meteorology and Climatology*. 50: 1872-1883. [DOI: 10.1175/JAMC-D-10-05014.1](https://doi.org/10.1175/JAMC-D-10-05014.1). (Open Access)

2011 and earlier

47. **Chow, W.T.L.**, R.L. Pope, C.A. Martin, and A.J. Brazel. 2011: "Observing and modeling the nocturnal park cool island of an arid city: Horizontal and vertical impacts." *Theoretical and Applied Climatology*. 103(1-2): 197-211. [DOI: 10.1007/s00704-010-0293-8](https://doi.org/10.1007/s00704-010-0293-8).
48. Sun, C.Y., A.J. Brazel, **W.T.L. Chow**, B.C. Hedquist, and L. Prashad. 2009: "Desert heat island study in winter by mobile transect and remote sensing techniques." *Theoretical and Applied Climatology*. 98(3-4): 323-335. [DOI: 10.1007/s00704-009-0120-2](https://doi.org/10.1007/s00704-009-0120-2).
49. **Chow, W.T.L.** and M. Roth. 2006: "Temporal dynamics of the urban heat island of Singapore." *International Journal of Climatology*. 26(15): 2243-2260. [DOI 10.1002/joc.1364](https://doi.org/10.1002/joc.1364) (Open Access).

Other Publications/Short Articles

2022

1. **Chow, W.T.L.** 2022: "Developing Climate Resilient Cities: We need to be quicker", 1st June 2022. *Asian Management Insights*. 9(2): 10-16. Invited Commentary. Available from [Asian Management Insights](https://www.asianmanagementinsights.com) (Online)
2. **Chow, W.T.L.** 2022: "Climate Change and Lord of the Rings?" Our Better World, 1st June 2022. Invited Commentary. Available from [Our Better World](https://www.ourbetterworld.com) (Online)
3. **Chow, W.T.L.**, R.J. Dawson, B. Glavovic, M. Haasnoot, M Pelling, and W. Solecki. 2022: "Fact sheet - Human Settlements" Intergovernmental Panel on Climate

Change Sixth Assessment Report, Working Group II: Impacts, Adaptation and Vulnerability. Available from [IPCC website](#) (online)

4. **Chow, W.T.L.** 2022: “Commentary: Coastal cities like Singapore face outsized risks – and opportunities – in a warming world” 15th March 2022. Invited Commentary. Available from [Channel NewsAsia](#) (online)
5. Schipper, E.L.F., V. Castan-Broto, and **W.T.L. Chow**. 2022: “Five key points in the IPCC report on climate change impacts and adaptation” 3rd March 2022. Invited Commentary. Available from [The Conversation](#) (online)

2021

6. United Nations Environment Programme (UNEP), I. Campbell, S. Sachar, J. Meisel, R. Nanavatty (leads), **W.T.L. Chow**, G. Schmitt, et al. (contributors). 2021: *Beating the Heat: A Sustainable Cooling Handbook for Cities*. Nairobi. Available from: <https://www.unep.org/resources/report/beating-heat-sustainable-cooling-handbook-cities> ([News release](#))
7. **Chow, W.T.L.** 2021: “We're in a climate casino. Here's how to fight against the odds” 25th August 2021. Invited Commentary. Available from [The Straits Times \(online\)](#)
8. **Chow, W.T.L.** 2021: “Commentary: Latest climate change report is the most important by far. Here's why” 10th August 2021. Invited Commentary. Available from [Channel NewsAsia \(online\)](#)

2020

9. Schmitt, G., and **W.T.L. Chow**, 2020: “Commentary: Singapore could be a model for cooler cities in a world heating up” 8th November, 2020. Invited Commentary. Available from [Channel NewsAsia \(online\)](#)
10. **Chow, W.T.L.**, 2020: “Commentary: The wonder of clear skies and returning wildlife is our new climate problem” 24th May 2020. Invited Commentary. Available from [Channel NewsAsia \(online\)](#)
11. **Chow, W.T.L.**, 2020: “Commentary: Reaching net-zero emissions will be ‘very challenging’. But watch Singapore try anyway” 7th March, 2020. Invited Commentary. Available from [Channel NewsAsia \(online\)](#)
12. **Chow, W.T.L.**, 2020: “Singapore's climate action: It is time to be more ambitious” 6th March, 2020. Commentary. Available from [The Business Times \(online\)](#) and [SMU Libraries](#)

2019

13. **Chow, W.T.L.**, 2019: "Commentary: How effectively can Singapore adapt to sea level rise?" 25th August, 2019. Invited Commentary. Available from [Channel NewsAsia \(online\)](#)

2018

14. **Chow, W.T.L.**, 2018: "How vulnerable is Singapore to climate change?" *The Straits Times*, Thursday 6th September 2018: B8. Invited Science Talk feature. Available from [The Straits Times \(online\)](#)
15. Voogt, J.A., and **W.T.L. Chow**, 2018: "CitiesIPCC in Edmonton turns the spotlight on urban areas." *Urban Climate News*, 67 (Mar 2018): 34-36. Available from <http://urban-climate.org/newsletters/IAUC067.pdf>

2016 and earlier

16. **Chow, W.T.L.**, 2016: "Implications of Global Climate Change on Southeast Asia" *Geography Digest*, Vol 2: 1-6. Humanities Branch, Curriculum Planning and Development Division 2, Ministry of Education
17. **Chow, W.T.L.**, 2015: "[How climate change will affect transboundary haze](#)" *TODAY*, Thursday 8th October 2015: 19-20. Op-ed commentary.
18. **Chow, W.T.L.**, 2014: "[Extreme weather events: Is climate change to blame?](#)" *The Straits Times*, Friday 12th December 2014: A31. Invited Op-ed.
19. Kaplan, S., C.S. Galletti, **W.T.L. Chow**, S.W. Myint, and A.J. Brazel. 2014: "Modeling directional albedo with high resolution imagery" *Urban Climate News*, 51 (Mar 2014): 7-12. Available from <http://urban-climate.org/newsletters/IAUC051.pdf>
20. **Chow, W.T.L.** 2013: "Urban climate in the news media: a retrospective review" *Urban Climate News*, 50 (Dec 2013): 2-3. Available from <http://urban-climate.org/newsletters/IAUC050.pdf>
21. Earl, S.R., A.J. Brazel, **W.T.L. Chow**, and D.M. Ruddell. 2010: "Twenty years of Climate Change in the Phoenix Metropolitan Area and McDowell Sonoran Preserve" *Mountain Lines*, 17(4): 10-11.
22. **Chow, W.T.L.**, 2010: "A brief survey of stadium microclimates and sports" *Urban Climate News*, 36 (Jun 2010): 2-4. Available from <http://urban-climate.org/IAUC036.pdf>

23. **Chow, W.T.L.**, 2009: "Conference Report: Urban Climates in Sin City: The 2009 AAG Annual Meeting in Las Vegas, March 22-27, 2009" *Urban Climate News*, 32 (Jun 2009): 26-27. Available from <http://urban-climate.org/IAUC032.pdf>
24. **Chow, W.T.L.**, 2008: "Beijing Olympics – an experiment in controlling urban air pollution?" *Urban Climate News*, 29 (Sep 2008): 2-4. Available from <http://urban-climate.org/IAUC029.pdf>
25. Roth, M. and **Chow, W.T.L.**, 2007: "Country report: UHI research in Singapore." *Urban Climate News*, 24 (Aug 2007): 7-11. Available from <http://urban-climate.org/IAUC024.pdf>

Research Interviews & Other Media

2022

1. APAC Network, 2022: "Technology led solutions: Sustainability Leaders Series" Recorded Interview. 6th October 2022. Available from [APAC Network](#).
2. BBC Newsday, 2022: "Why is Japan having its worst ever heatwave?" Live Radio Interview with the BBC World Service. 29th June 2022. Available from [BBC Online](#).
3. Nordic Institute of Asian Studies, 2022: "Urban Climate Change and Adaptation: Messages from the IPCC Report for Southeast Asia" *Nordic Asia Podcast*. Recorded podcast interview. 4th April 2022. Available from [Nordic Asia online](#)
4. Liang, L. 2022: "Relentless work, for no money: Southeast Asian climate scientists share their IPCC experience" *Eco-Business: The EB Podcast* Recorded podcast interview. 22nd March 2022. Available from [Eco-Business](#) Online

2021

5. **Chow W.T.L.** 2021: "COP26 reflections" *Asia First* Live Radio interview. November 15th 2021. Available from [CNA938 Live](#)
6. **Chow, W.T.L.** 2021: "The Climate Conversations - S2: It's a 'code red for humanity', but what next after the IPCC's latest report on the health of our planet? | EP 45" 20th August 2021. Podcast. Available from [Channel NewsAsia \(online\)](#)
7. **Chow W.T.L.** 2021: "IPCC 6th Assessment Report release" *Asia First* 10th August 2021. Live radio interview. Available from [CNA938 Live](#)
8. Zheng, Z. 2021: "58 years after S'pore last water rationing exercise, some might be taking clean water for granted." Profile Feature. Available from [Mothership](#)

2020

9. **Chow, W.T.L.**, 2020: "The Climate Conversations: Getting down to the big picture science of climate change | EP 1" 21st August 2020. Podcast. Available from [Channel NewsAsia \(online\)](#)
10. **Chow, W.T.L.**, 2020: "COVID-19 and Climate Change" *Singapore Today*. Live Radio Interview 5th October 2020. Available from [CNA938Live](#)
11. **Chow, W.T.L.**, 2020: "S'porean climate scientist compares climate change to S'pore football — things are tough & hard to solve" 15th February 2020. In-depth interview. Available from [Mothership \(online\)](#)
12. **Chow, W.T.L.**, 2020: "Things you always wanted to ask: A climate scientist" 7th January 2020. Video interview. Available from [Mothership \(online\)](#)
13. **Chow, W.T.L.**, 2020: "Expert explains: Extreme Weather" 10th February 2020. Video interview. Available from [Mothership \(online\)](#)
14. **Chow, W.T.L.**, 2020: "Keeping cool in a world on fire: Green Pulse Ep 14" 22nd January 2020. Podcast. Available from [The Straits Times \(online\)](#)

2019 and earlier

15. **Chow, W.T.L.**, 2019: "Perspectives: Interview with Winston Chow". 1st October 2019. Video interview. Available from [Eco Business TV \(online\)](#)
16. **Chow, W.T.L.**, 2019: "Adopting sustainable urban development measures for continued economic growth" 1st October 2019 Podcast. Available from [SMU Engage \(online\)](#)
17. **Chow, W.T.L.**, 2019: "Weathering the storm better" Wednesday, 16th October 2019. In-depth interview. Available from [Business Times \(online\)](#)
18. Tan, A., 2018: "Singapore don to take part in international climate report" 30th April, 2018. Profile Feature. Available from [The Straits Times \(online\)](#)

Research Presentations, Public Talks, and Conference Proceedings (from 2019 onwards)**2022**

1. **Chow, W.T.L.**, Z. Zaiton Ibrahim, J. Roy, and C. Singh. 2022: "Developing Climate Resilient Cities in Asia: The How's, Why's and So What's" Cities & Built Environment Day, Singapore Pavilion 7th November 2022. Climate Conference of Parties (COP27). [Invited Oral Moderator](#).

2. E. An, **W.T.L. Chow**, M. Koh, J. Lam, L. Sorkin, . 2022: “Enhancing Cities' Liveability and Sustainability in the Face of Climate Change” Cities & Built Environment Day, Singapore Pavilion 7th November 2022. Climate Conference of Parties (COP27). [Invited Oral Panellist](#).
3. **Chow, W.T.L.**, S. Bell, S. Marvin, L. Rickard, and A. Trundle. 2022: “Plenary Panel #3: Can City Research Solve Difficult Global Challenges?” Difficult Urban Questions Cities@Melbourne Symposium 7th October 2022. University of Melbourne Centre for Cities. [Invited Oral Panellist](#).
4. K.P.Y Lai and **W.T.L. Chow**. 2022: “How ‘green’ is green FinTech? A critical enquiry into the growth of data centres in Southeast Asia” Luxembourg Institute of Social-Economic Research (LISER) Seminar Series. 13th September 2022. [Invited Co-presenter; hybrid presentation](#)
5. **Chow, W.T.L.** 2022: “Masterclass: Climate-resilient Cities of the Future” SMU Asia Summit. 11th August 2022. Singapore Management University. [Invited Oral Presenter](#).
6. **Chow, W.T.L.** 2022: “Enabling Climate-Resilient Development in Cities & the Singapore Green Plan 2030” World Cities Summit 2022 – Science of Cities Symposium. Centre for Liveable Cities, Singapore. Marina Bay Sands Convention Centre, 31st July 2022. [Invited Oral Presenter and Panellist](#)
7. **Chow, W.T.L.** 2022: “Accelerating a Sustainable Transition to Avert a +2°C world” Keynote Speech, Youth Ecosperity Dialogue. Temasek Foundation and Singapore Management University. Singapore Management University Hall. 6th June 2022. [Invited Keynote Speaker](#)
8. **Chow, W.T.L.** 2022: “Urban climate risks in the IPCC AR6” Asia-Pacific Urban Climate Meetings, University of New South Wales, Australia. 25th May 2022. Virtual Presentation.
9. **Chow, W.T.L.** 2022: “Land Administration and Urban Climate Change Adaptation & Mitigation” International Seminar on United Nations Global Geospatial Information Management. Singapore Land Authority, Suntec City Convention Centre, Singapore. 17th May 2022. [Invited Speaker and Panellist](#).
10. **Chow, W.T.L.** 2022: “The challenge of a +2°C world for urban climate science and policy – notes from Singapore” Hong Kong University of Science and Technology Sustainability Seminar Series Spring 2021/2022. 6th May 2022. [Invited Speaker Virtual Presentation](#)
11. **Chow, W.T.L.** 2022: “The IPCC AR6 WGII report: What does it mean for Singapore?” Singapore Green Plan Conversation on Resilient Future Pillar, Ministry of Sustainability and Environment, Singapore. 25th March 2022. Invited

Speaker and Panellist. [Virtual Presentation](#).

12. **Chow, W.T.L.** and V. Castan-Broto. 2022: "IPCC Report Release: Climate + Justice + Cities Speaker Series" School of Cities, University of Toronto. 10th March 2022. [Virtual presentation](#)

2021

13. Bhardwaj, A., R.J. Wasson, **W.T.L. Chow**, and A.D. Ziegler. 2021: "High-Intensity Monsoon Rainfall Variability and its Attributes in Upper Ganges Catchment in the Indian Himalaya during 1901–2013" American Geophysical Union Fall Meeting 2021. 16th December 2021. [Poster Presentation](#).
14. **Chow, W.T.L.** 2021: "Climate Ready Cities: How does Singapore prepare for climate change?" Temasek Foundation Future of Governance in Southeast Asia: Climate Change. Civil Service College, Singapore. 8th December 2021. Invited Guest Lecture.
15. **Chow, W.T.L.** 2021: "Academic Panel 1: Energy, Technology and the Environment." *Sustainable Development and Commerce in ASEAN Cities*. ASEAN Law Research Network: Legal Blueprints Conference Series. Singapore. 12 November 2021. [Invited Moderator \(Live recording\)](#).
16. **Chow, W.T.L.** 2021: "Sharing of COP26 outcomes" Voices from COP26: Why it matters to businesses in Singapore. World Wildlife Fund – Singapore. 25th November 2021. [Invited Speaker](#).
17. **Chow, W.T.L.** 2021: "The urban science and policy challenge in a 2°C+ world – notes from Singapore" 19th November 2021. Early Career Researchers. Future Earth: Taipei. [Invited Speaker](#).
18. **Chow, W.T.L.** 2021: "Technology & innovation for enabling urban climate solutions" Lee Kuan Yew Senior Fellowship in Public Service Programme (SF3). Lee Kuan Yew School of Public Policy, National University of Singapore. 18th November 2021. [Invited Guest Lecture](#).
19. **Chow, W.T.L.** 2021: "COP26 Summit: Reflections" Environment and Sustainability Committee Webinar Series. American Chamber of Commerce – Singapore, Singapore. 16th November, 2021. [Invited Panellist](#).
20. **Chow, W.T.L.** 2021: "The Need for Food Tech in Today's World." Green Market: SG Food Tech Fest. Asia Sustainability Forum and National Library Board. Singapore. 12th November 2021. [Invited Speaker](#).
21. **Chow, W.T.L.** 2021: "Understanding the climate challenge: Panel Discussion" Launch of Climate Governance Singapore, Singapore. Climate Governance Initiative. 28th October 2021. [Invited Panellist](#).

22. **Chow, W.T.L.** 2021: "Global Cooling Handbook announcement" *Innovate for Cities Conference*. United Nations-Habitat and the Global Covenant of Mayors for Climate & Energy. 11th October 2021. [Invited Speaker \(Live recording\)](#)
23. **Chow, W.T.L.** 2021: "Plenary 2 - Adaptation and resilience as integrated approaches to tackling climate change" *Innovate for Cities Conference*. United Nations-Habitat and the Global Covenant of Mayors for Climate & Energy. 12th October 2021. [Invited Speaker \(Live recording\)](#).
24. **Chow, W.T.L.** 2021: "Climate Change, Culture and Economy" Singapore Business Series: Reimagining business in the Green Economy. Singapore Pavilion, World Expo. Dubai. 6th October 2021. [Invited Speaker \(Live recording\)](#)
25. **Chow, W.T.L.** 2021: "Urban bio-meteorological risks from climate change: An Asian perspective" Connecting Our World: International Congress of Biometeorology. 22nd September 2021. [Invited Plenary Session Talk](#).
26. Ching, G; S.K. Yik, A.J. Tan, Y. Dzyuban, P.J. Crank, S. Banerjee, and **W.T.L. Chow** 2021: "Sentiment Analysis of Weather-related Tweets in Hot Climates" Connecting Our World: International Congress of Biometeorology. 21st September 2021. [Poster Presentation](#).
27. **Chow, W.T.L.** 2021: "SMU x NLB Series: Building Climate Resilient Cities" Singapore Management University and National Library Board, Singapore. 9th September 2021. [Invited Moderator](#).
28. **Chow, W.T.L.** 2021: "Conversation with Ambassadors: Extraordinary human effects on the lives and histories of Earth." Diverse City: Internationalisation at Home. Singapore Management University, Singapore. 3rd September 2021. [Invited Moderator \(Live Recording\)](#).
29. **Chow, W.T.L.** 2021: "Urban areas in the IPCC AR6 WGI report" IPCC Ar6 – What does it mean for Singapore? Ministry of Sustainability and Environment. 31st August 2021. [Invited Speaker \(Live recording\)](#).
30. **Chow, W.T.L.** 2021: "Stopping climate change requires more than just science!" Dunman High School Distinguished Speaker Series. Singapore. 4th August 2021. [Invited Speaker](#).
31. **Chow, W.T.L.** 2021: "SG Green Plan: a resilient future? The Singapore Green Plan 2030 (SGP2030): Opportunities and Challenges in Achieving Environmental Sustainability" Ministry of Education Dialogue Session with Humanities Scholars. Singapore. 16th July 2021. Invited Speaker.
32. **Chow, W.T.L.** 2021: "Plenary Session 2 – Role of Leadership in Developing the Built Environment Business Ecosystem" BuildSG LEAD Summit 2021. Building and

Construction Authority, Singapore. 28th April 2021. [Invited Moderator \(Live Recording\)](#) .

33. **Chow, W.T.L.** 2021: “The challenges of estimating urban climate risks & vulnerability” Climate Risk Virtual Dialogue Series – Singapore Actuarial Society. Singapore. 25th June 2021 [Invited Talk](#),
34. **Chow, W.T.L.** 2021: “Combatting urban heat stress: A Singapore case study” I2P.17 Adaptation in South East Asian Cities: Solutions for Heat Stress, Flooding & Planning an Integrated Vision for the Future. *Singapore International Water Week*. Singapore. 30th June 2021. [Invited Talk](#).
35. **Chow, W.T.L.** 2021: “Net Zero: The hows, whys, and challenges” Road to Net Zero: Keppel Corporation. Singapore 10th June 2021. Invited Speaker.
36. **Chow, W.T.L.** 2021: “Sustainability Exchange: The Showcase” EB Impact, Facebook, and Climate Action SG Alliance. Singapore. 25th May 2021. [Invited Speaker](#) and Judge ([Media Coverage](#)).
37. **Chow, W.T.L.** 2021: “Urban heat adaptation and mitigation: What does the future hold for Singapore?” Heat in Urban Asia: Past, Present, and Future. Asia Research Institute, National University of Singapore. Singapore. 21st April 2021. [Invited Speaker](#).
38. **Chow, W.T.L.** 2021: “Sustainability, climate change, and standards: Pathways to consider” Enterprise Singapore Quality and Standards Partners Appreciation Event 2021. Singapore. 20th April 2021. [Invited Speaker](#).
39. **Chow, W.T.L.** 2021: “What can scientific research tell us about stopping climate change?” Can We Stop Climate Change? Conversations for Awareness on Religion and the Environment (CARE) Series. Singapore. 11th April 2021. [Invited Speaker \(recorded\)](#),
40. **Chow, W.T.L.** 2021: “Passive and Active Strategies for Cooler, Sustainable Cities” SGBC-BCA Webinar: Creating Sustainable Districts through Climate-Responsive Design. Singapore Green Building Council. Singapore. 24th March 2021. [Invited Lecture](#).
41. **Chow, W.T.L.** 2021: “Water in urban Singapore: Past, present and future” SMU Verts x PUB World Water Day talk. 19th March 2021. Singapore. [Invited Talk](#) (Note: Report on event from [Mothership Singapore](#)),
42. **Chow, W.T.L.** 2021: “Fighting Climate Change with Clean Energy” [SMU Growing Infrastructure Executive Development Course](#) – Enabling & Structuring for Private Sector Participation in Finance and Innovation. Singapore. 15th March 2021. Guest Lecture ,

43. **Chow, W.T.L.** 2021: "Climate Hack 2021: Climate risks in cities & urban adaptation" 13th March 2021. Singapore International Foundation & Code for Asia. Singapore. [Invited Speaker](#).
44. **Chow W.T.L.** 2021: "Why is communication so important for climate change education?" National Institute of Education Singapore Kaleidoscope Symposium – "Challenges and Opportunities for Singapore of the future." Singapore. 24th February 2021. Invited Guest Lecture.
45. **Chow, W.T.L.** 2021: "Panel 1: The Climate Crisis. Local perspectives on Global Problems." 5th Annual Wee Kim Wee Soka International Seminar on Global Peace and Understanding. Singapore Management University, Singapore. 21st January 2021. [Invited Moderator](#) ([Live recording](#)).

2020

46. Santos, B.P. and **W.T.L. Chow**. 2020: "Changemakers Conversations: Urban Sustainability" Institute of Innovation & Entrepreneurship. Singapore Management University. Singapore, Singapore. 9th December 2020. [Co-moderator for panel discussion & online webinar](#)
47. **Chow, W.T.L.** 2020: "What climate risks does SE Asia face over the next thirty years?" [London School of Economics and Political Science Southeast Asia Week 2020: Environmental Resilience and Southeast Asia](#). 26-30 October. London, United Kingdom. Invited Paper & [Online Presentation](#).
48. Lynn, J., A. Purbo, **W.T.L. Chow**, and L.Y. Sulistiawati. 2020: "APCEL-IPCC Webinar: Debunking the Myths About the IPCC" Asia-Pacific Centre for Environmental Law, National University of Singapore, Singapore. 3rd September 2020. Invited speaker & [Online Presentation](#).
49. **Chow, W.T.L.**, L.P. Koh, and H. Neo. 2020: "COVID-19: The Circuit Breaker of Unsustainable Practices" Sustainable.org 30th May 2020. Singapore. Invited Panellist & [Online Webinar](#)
50. **Chow, W.T.L.**, 2020: "Climate and COVID: Has anything changed?" [#SGStemTalk & Trivia](#) 29th May 2020. Singapore, Singapore. Invited Oral Presentation. [Online presentation](#)

2019

51. Sin, H.L. and **W.T.L. Chow**. 2019: "Singapore's home, sanctuary and heritage: Environmental perception within Wildlife Reserve." ATLAS SIG Meeting and Conference: Heritage Tourism and Education Integrating Cultural and Natural Heritage in Urban Tourism: Innovations, Discourses and Collaborations. 21-22

November. Macao SAR, China. Paper Presentation.

52. **Chow, W.T.L.** 2019: “Impact of sea level rise on ASEAN countries” National University of Singapore Centre for International Law Roundtable on Sea Level Rise and International Law, 14–15 November. Singapore, Singapore. Paper Presentation & Invited Panellist.
53. Molina, L., A. Parker...**W.T.L. Chow**, et.al. “Towards an interdisciplinary knowledge community on the critical understanding of emergent climate system intervention technologies in Southeast Asia” Hong Kong University of Science and Technology, Boston University, and the Solar Radiation Management Governance Initiative (SRMGI). 8-9 November. Bali, Indonesia. Invited Workshop Delegate (20 participants).
54. **Chow, W.T.L.** 2019: “Future-proofing cities for climate change: How sustainability matters” Singapore Green Building Council Leadership Conversations 2019. 5th November. Singapore, Singapore. Special Invited Paper Presentation & Panellist.
55. Brail, S., G. Chua, L.L. Heng, and **W.T.L. Chow**, 2019: “Are there lessons from the region or overseas that can offer a path forward for Singapore (and other global cities) for businesses under the age of climate disruption?” in “Inspiring Solutions: Growing Green” Singapore Management University City Dialogues 24-25 October. Singapore, Singapore. [Panel Moderator](#).
56. Barrett, K. **W.T.L. Chow**, G. Flato, A. Moksitt, E. Källén, L. Lee, E. Ho, and L. Kong. 2019: “Symposium on Sea Level Rise in Southeast Asia” Intergovernmental Panel on Climate Change and Singapore Management University, 23rd October. Singapore, Singapore. Invited Panellist. Panel Presentation. Video and Slides available at [Intergovernmental Panel on Climate Change](#)
57. Siemiatycki, M., M. Fox, S. Brail...**W.T.L. Chow**, et al. “Global Urban Network: Inaugural Meeting” School of Cities, University of Toronto, 16-18 October. Toronto, Canada. Invited Delegate (30 participants). News feature [available at University of Toronto](#).
58. **Chow, W.T.L.** 2019: “Considering a 2°C world in Southeast Asia” Decoding the Paris Rulebook for Southeast Asia: Implementation and its Challenges, Centre for International Law, National University of Singapore. 1-2 October. Singapore, Singapore. Paper Presentation & Invited Panellist.
59. **Chow, W.T.L.** 2019: “The Challenge of Keeping Singapore Cool” 1st Sustainable Tropical Urbanism Symposium: Tropical cities in a warming world. James Cook University – Singapore. 27 September. Singapore, Singapore. Paper presentation.
60. **Chow, W.T.L.** 2019: “Climate Change & Singapore – Science & Impacts” Temasek International Investor Presentation. 13 September. Singapore, Singapore. Invited

Paper Presentation

61. Schmitt, G., A. Tan, Y. Yan, **W.T.L. Chow**, and M. Leong, 2019: "Building and Cooling Singapore in an Era of Climate Change." Centre for Liveable Cities Lecture Series. 8th August. Singapore, Singapore. Invited Panellist. Video available [online at Centre for Liveable Cities](#).
62. Meili, N., G. Manoli, P. Burlando, **W.T.L. Chow**, A.M. Coutts, E. Daly, K.A. Nice, M. Roth, N.J. Tapper, E. Velasco, E.R. Vivoni, and S. Fatichi "Vegetation biophysical and ecophysiological properties mediating urban microclimate and water fluxes: A modelling study" Asia Oceania Geosciences Society. 16th Annual Meeting, July 28 - August 2. Singapore. Singapore. Poster Presentation.
63. **Chow, W.T.L.**, S-L. Heng, R. Oh, and C. Kho. 2019: "How do vegetation characteristics affect visitor comfort within tropical urban parks? Results from the Singapore Botanic Gardens and Bishan-Ang Mo Kio Park." National Parks Board, Centre of Urban Greenery and Ecology Seminary, 25 May. Singapore, Singapore. Invited Paper Presentation.
64. Goodell, J. and **W.T.L. Chow** 2019: "The Water Will Come: Rising Seas, Sinking Cities, and the Remaking of the Civilized World" Centre for Liveable Cities Lecture Series. 10th May. Singapore, Singapore. Moderator. Video available [online at Centre for Liveable Cities](#).
65. **Chow, W.T.L.**, S-L. Heng, R. Oh, C. Kho, and A.Y.M. Lim. 2019: "Comparison of outdoor thermal indices in urban parks: which index is most 'accurate'?" American Association of Geographers Annual Meeting, 3 -7 April. Washington D.C., U.S.A. Poster presentation.
66. Verlinde, J., N.S. Tan, and **W.T.L. Chow** 2019: "The Water Will Come: Rising Seas, Sinking Cities, and the Remaking of the Civilized World" Centre for Liveable Cities Lecture Series. 12th February. Singapore, Singapore. Moderator. Video available [online at Centre for Liveable Cities](#).
67. **Chow, W.T.L.**, S-L. Heng, R. Oh, and C. Kho. 2019: "Reducing Heat Risks through Large Urban Parks – Direct and Indirect Benefits from a Tropical Case Study" 99th American Meteorological Society Annual Meeting. 6-10 January. Phoenix, Arizona, USA. Poster Presentation.