

## **BIODATA FOR DR. VILAS NITIVATTANANON**

### **Affiliation**

Professor

Urban Innovation and Sustainability Program; Department of Development and Sustainability; School of Environment, Resources and Development

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### **Areas of Expertise (Keywords)**

Systems approach and management for urban sustainability

Urban competitiveness and resilience

Climate change, coastal urbanization and tourism

Waste recycling and circular economy

Strategic water and infrastructure development

Economic and environmental sustainability assessment

### **Education**

Ph.D. (Engineering and Systems Management), University of Pittsburgh, USA, 1994

M.Eng. (Water Resources), Asian Institute of Technology, Thailand, 1991

M.A. (Economics), Thammasat University, Thailand, 1989

B.Eng. (Civil Engineering), Chulalongkorn University, Thailand, 1985

### **Professional Experience**

2021–Present: Professor, Urban Innovation and Sustainability, School of Environment, Resources and Development, Asian Institute of Technology, Thailand

2021-2023: Dean, School of Environment, Resources and Development, Asian Institute of Technology, Thailand

2021: Head, Department of Development and Sustainability, School of Environment, Resources and Development, Asian Institute of Technology, Thailand

2019-2022: Chair, Urban Environmental Management/Urban Innovation and Sustainability Academic Program, Department of Development and Sustainability, School of Environment, Resources and Development, Asian Institute of Technology, Thailand

2020: Coordinator, Development of Professional Master's in Environmental and Social Assessment and Management, approved academic program of Asian Institute of Technology in Yangon, Myanmar

2019: Visiting Faculty, College of Ecology and Environment, Xiamen University, Fujian, China

2015: Coordinator, Gender and Development Studies and Urban Environmental Management Fields of Study, School of Environment, Resources and Development, Asian Institute of Technology, Thailand

2012- 2017: Coordinator, Professional Master's in Urban Management, academic program at Asian Institute of Technology in Ho Chi Min City, Vietnam

2012–2020: Associate Professor, Urban Environmental Management, School of Environment, Resources and Development, Asian Institute of Technology, Thailand

2010-2013: Coordinator, Urban Environmental Management Field of Study, School of Environment, Resources and Development, Asian Institute of Technology, Thailand

2004–2011: Assistant Professor, Urban Environmental Management, School of Environment, Resources and Development, Asian Institute of Technology, Thailand

2003-2004: Program Manager, Environmental Exchange Division, Institute of International Education, Thailand (Asia Regional Manager of Exchange Program for Sustainable Growth as part of the United States – Asia Environmental Partnership, a program under USAID)

1995-2003: Environmental Services Manager, Seatec International Co., Ltd., Thailand

1994-1995: Systems Engineer, Consolidated Rail Corporation (CONRAIL), USA

1992-1994: Graduate Student Researcher/Teaching Fellow, University of Pittsburgh, USA

1985-1989: Technical Information Service Engineer, Siam Cement Co., Ltd., Thailand

### **Selected Research and Consultancy Services Experience:**

“Willingness to Pay Study for Climate Mitigation through Increasing Renewable Sources of Power Mix: Case of Thailand”, supported by University of Tokyo, 2021-2022, as Principal Investigator.

“Integrated Assessment of SDGs using Earth Observation Technology for Bangkok Metropolitan Region”, supported by National Research Council of Thailand, 2019-2021, as Principal Investigator.

“Assessment of Material Recycling Related to Used Beverage Cartons (UBCs)”, supported by Tetra Pak Co., Ltd., 2019-2020, as Principal Investigator.

“Connecting climate change, hydrology & fisheries for energy and food security in Lower Mekong Basin”, under PEER program of USAID, 2018-2022, as Co-Principal Investigator.

“Comparative Assessment of Hydrological Hazards and Adaptation Policies in Julong and Chao Phraya river basins”, joint research project supported by Chinese and Thai governments, 2018-2022, as Co-Principal Investigator

“Coastal areas governance in the context of rapid tourism urbanization and climate change in Southeast Asia”, research project supported by French Ministry of Foreign Affairs and International Development (MFAID), 2016-2018, as Principal Investigator

“An Assessment of Used Beverage Cartons (UBCs) in Recyclable Streams”, supported by Tetra Pak co., Ltd., 2017-2018, as Principal Investigator.

“Knowledge Management for Sustainable Tourism: Development of Education Curriculum for Accommodation Management”, supported by DASTA, 2016-2017, as Co-Principal Investigator.

“Asia Pacific Regional Collaboration on Ecolabelling, under Project: Mainstreaming Resource Efficiency Aspects into Sustainable Development Planning, Policies and Regulatory Frameworks”, research project supported by United Nations Environmental Program (UNEP), 2016-2017, as Principal Investigator

“Study of Low Carbon Tourism Models for Developing Regional Eco-Tourism Standards”, research project supported by Designated Area for Sustainable Tourism Administration (DASTA), in 2015-2016, as Principal Investigator

“Strengthening Integrated Water Resources Management Implementation in Thailand”, ADB Technical Assistance, in 2014-2015, as Environmental Specialist.

“Vulnerability and Adaptation to Climate Change in Coastal Cities of Southeast Asia”, research cooperation supported by International Climate Initiative (ICI), in 2011-2014, as Principal Investigator.

“Development of Community-based Low Carbon Tourism in Selected Areas, Thailand”, research project supported by Designated Area for Sustainable Tourism Administration (DASTA), in 2014, as Co-Principal Investigator

“Post-Consumer Beverage Carton Study”, research project supported by Tetra Pak Co., Ltd., in 2014, as Principal Investigator

“Measuring the Influence of Sound Material Society (SMS) in Thailand”, research project supported by SUMITOMO Foundation, in 2013-2014, as Principal Investigator

“Development of Low Carbon Hotel Guidelines in Koh Chang, Thailand”, research project supported by Designated Area for Sustainable Tourism Administration (DASTA), in 2012-2013, as Co-Principal Investigator

“Comparative Assessment of Infrastructure Development in Thailand and Korea”, ADB Technical Assistance, in 2011-2012, as Water Specialist.

“Strategic Environmental Assessment (SEA) for Tourism Development in Golden Quadrangle of Greater Mekong Sub-region (GMS), program under ADB Environmental Operations Centre (EOC), in 2010-2011, as Environmental Specialist.

“Pilot Study for Preparation of Transboundary Environmental Impact Assessment (TbEIA) Framework and Guidance in Mekong River Basin”, Mekong River Commission (MRC), in 2009-2010, as Consultant.

“Evaluation of TIPMSE Programs as a Tool to Support Decision Making for Promoting Waste Recycling System in Thailand”, Joint Industrial Research between AIT and Thailand Institute for Packaging Management for Sustainable Environment (TIPMSE), in 2008-2010, as Principal Investigator

“Southeast Asia Urban Environmental Applications (SEA-UEMA) Project”, CIDA-AIT Partnership in 2004-2010. As Coordinator.

“Research for Development of Pilot Rainwater Harvesting Project”, in 2008-2010, Joint Industrial Research - as Principal Investigator

“An Assessment of Septage Management: Thailand”, ECO-Asia Program under USAID, 2009, as Water and Sanitation Specialist.

“Construction and Demolition Waste Characterization and Management Options with a Focus on Bangkok Metropolitan Region”, in 2007-2009, Joint Industrial Research between AIT and Siam Cement Group - as Principal Investigator

“National capacity and training needs assessments for different stakeholder groups in order to identify gaps, needs, and strengths and opportunities for building capacity in Integrated Coastal Management (ICM)”, in 2008-2009, program under Mangroves for the Future of IUCN and UNDP – as Co-Principal Investigator

“Environmental Assessment for Highway Expansion Project in GMS”, ADB Technical Assistance, in 2008-2009, as Consultant.

“Study on Low-Cost and Low-Technology Night soil and Wastewater Treatment System in Thailand”, Institute for Global Environmental Studies (IGES) (2009), as Consultant.

“Regional Study on Sustainable Infrastructure Development with Focus on Water, Waste and Transportation”, UNESCAP’s Seoul Initiative on Green Growth for promoting environmentally sustainable development in Asia (2006-2007), as Consultant.

“Country Assessment for Water and Sanitation Sector: Thailand”, ECO-Asia Program under USAID, 2006, as Water and Sanitation Specialist.

“Project for Strengthening Environmental Management of Local Government in Wastewater and Solid Waste Management”, of the Office of Natural Resources and Environmental Policy and Planning (ONEP) in 2004-05, as Project Advisor.

“Capacity Building for Regional Environmental Management,” Asian Development Bank Technical Assistance (ADB TA) for Ministry of Natural Resources and Environment (MONRE), Thailand, in 2001-03. As Environmental Planner.

“Environmental Capacity and Preparation of Guidelines,” of the Department of Highways (DOH), World Bank loan project for Thailand, in 2001-02. As Project Coordinator/Environmental Engineer.

“Enhancing the Environmental Management Efficiency of Local Government Agencies (Monitoring and Evaluation for Construction and Improvement of 20 Solid Waste Disposal Sites),” of the previously Office of Environmental Policy and Planning (OEPP), Thailand – under MIYAZAWA (Japanese) loan program, in 2000-01. As Team Leader.

“Master Plan Study for Management of Khao Chamao-Khao Wong National Park,” of the Department of National Parks, Wildlife and Sanctuary (DNP), in 2001-02. As Team Leader.

“Project Management Consultant for the Metropolitan Rapid Transit Authority (MRTA)’s Initial System Project,” Thailand, a Japan Bank for International Co-operation (JBIC) funded project, in 1999-2002. As Senior Environmental Engineer.

“Environmental Management for Upper Watershed Areas of Chiang Mai Province,” of the OEPP, Thailand, in 1998-2002. As Team Leader/Water Resources and Monitoring Specialist.

“Samut Prakarn Wastewater Management Project - Effluent Reuse Study,” of PCD/ADB, Thailand, in 2000-01. As Water Resources Engineer.

“Study and Analysis for Feasibility of Establishing Solid Waste Disposal Centers in Pollution Control Zones for Bangkok Metropolitan and Pattaya City Regions,” of the Pollution Control Department (PCD), Thailand, in 2000. As Team Coordinator/Environmental Specialist.

“Yangtze River Basin Flood Control Project,” PR China, of the World Bank, in 1999. As Environmental Consultant.

“Evaluation of Danish Co-operation in Environment (DANCED) Programs in Thailand,” in 1999. As Environmental Specialist.

“Revised Economic Analysis of Song Khla Lake’s Salinity Barrier,” a DANCED funded project for the OEPP, Thailand, in 1998. As Economist/Civil Engineer.

“Pilot Privatization for Provincial Waterworks Authority”, an IBRD funded project for Patum Thani Province, Thailand, in 1998. As Water Supply Engineer/Economist.

“Environmental Impact Assessment (EIA) for Lampang-Chiang Mai Motorway,” a Japan International Co-operation Agency (JICA) supported project for DOH, in 1997-98. As Water Resources Specialist.

“Strengthening the Environmental Management in the DOH”, in 1996-97. As Institutional/Training Expert.

“Master Plan Study for the Five Southern Border Provinces of Thailand,” of the Office of National Economic and Social Development Board (NESDB), in 1994-95. As Economic Infrastructure Group Leader.

“Optimizing Pumping Schedule for Energy Cost Savings in City of Pittsburgh’s Water Supply System,” of the City of Pittsburgh, USA, in 1992-94. As Research Associate.

### **Present Research Involvements**

“Appropriate costing methods of climate change adaptation in infrastructure development: experimental studies for road and related infrastructure projects in Cambodia”, supported by Cambodian Climate Alliance (CCA), as Principal Investigator.

“Development and dissemination of technical guidelines for plastics and resin pellets leakage prevention from factories and informal recycling sector in the ASEAN”, supported by RRC.AP and ERIA, as Co-Principal Investigator.

### **Doctoral Research Supervision**

Enhancing Local Capacity on Solid Waste Separation and Recycling (*completed 2009*)

Optimization of Solid Waste Management incorporating Socio-economic Aspects (*completed 2010*)

Assessment of Impacts from Second-hand Products in Cambodia (*completed 2010*)

Development of Strategic Decision Making System for Urban Wastewater Reuse Applications (*completed 2011*)

Wastewater Management for Sustainable Urban Development (*completed in 2011*)

Assessment of Accessibility in Urban Public Transport (*completed 2012*)

Effective Coordination and Integration of Energy and Transport Policies for CO<sub>2</sub> Mitigation (*completed in 2013*)

Integrated Assessment of Energy, Carbon and Remote Sensing in Urban Climate Change (*completed in 2013*)

Environmental Policy for Noise Management: A Case of Suvarnaphumi International Airport (*completed 2014*)

Reverse Logistics for Waste Management (*completed 2014*)

Developing a Sustainability Assessment Model for Municipal Waste Management Strategy (*completed 2015*)

Evaluation for Upscaling Community-based Housing Finance to City Level (*completed 2015*)

Integrated Assessment for Climate Impacts and Adaptation in Coastal Cities’ Infrastructure (*completed 2016*)

Assessment of Accessibility in Public Urban Space to support Aging Society (*completed 2016*)

- Urban Stormwater Governance for Extended Mega Urban Region (*completed 2017*)
- Mainstreaming the Circular Economy Concept for Sustainable Resource Management: the Case of Packaging Waste (*completed 2017*)
- Assessing Integrated Impacts of Implementing Low Carbon Tourism Program for Sustainable Tourism in a World Heritage City (*completed 2019*)
- Private House-Builders' Roles on Affordable Housing Supply for Mid-income Group in Yangon, Myanmar (*completed 2019*)
- Integration of Climate Change Adaptation and Urban Development in Southeast Asia (*completed 2020*)
- Enhancing Environmental Management for Sustainable Tourism in Eastern Thailand (*completed 2021*)
- Sustainability Assessment of Special Economic Zone Development Program (*completed 2022*)
- Strategic Environmental Assessment for Integrated Water Resources Management (*on-going*)
- From Consumption to Pro-Environmental Behavior: Understanding Factors behind Single-Use Plastic Waste Reduction (*on-going*)
- Roles and Influences of Socio-Economics in Assessing and Enhancing Urban Hydrological Resilience in Chao Phraya River Basin (*on-going*)
- Enhancing Socio-ecological Adaptation to Climate Change in Urban Sub-region of Middle Chao Phraya River Basin (*on-going*)

### Selected Publications

- Pan, L., Lu, L., Fu, P., **Nitivattananon, V.**, Guo, H. and Li, Q. (2023). "Understanding spatiotemporal evolution of the surface urban heat island in the Bangkok metropolitan region from 2000 to 2020 using enhanced land surface temperature", *Geoinformatics, Natural Hazards and Risk*, 14(1), 2174904.
- Htet, S.T.T. and **Nitivattananon, V.** (2022). "Assessing capacity for environmental and social sustainability management in Myanmar", *Proceedings of 8th International Conference on Sustainable Energy and Environment (SEE 2022): The Road to Net-Zero: Energy Transition Challenges and Solutions*, 7-9 November 2022, Bangkok, Thailand.
- Sedtha, S., **Nitivattananon, V.**, Ahmad, M.M.; Cruz, S.G. (2022). "The First Step of Single-Use Plastics Reduction in Thailand", *Sustainability*, 15(45).
- Virdis, S.G.P., Xue, W., Winijkul, E., **Nitivattananon, V.**, and Punpukdee, P. (2022). "Remote sensing of tropical riverine water quality using sentinel-2 MSI and field observations", *Ecological Indicators*, 44 (109472).
- Prathaithep, W.B., **Nitivattananon, V.**, Kim, S.M., Shrestha, S. (2022). "Enhancing Flood Management Plan (FMP) Through Integration Strategic Environmental Assessment (SEA) in Thailand: The Case of Ayutthaya", *International Journal of Sustainable Development and Planning*, 17(4), pp. 1101-1115.
- Nitivattananon, V.** and Alipour, H. (2022). "Special Issue "Systems Approach and Management for Urban Sustainability", *Sustainability*, Editors.
- Chao-Amonphat, S., **Nitivattananon, V.** and Srinonil, S. (2022). "Adaptation measures on hydrological risks and climate change impacts in urbanized sub-region, Thailand: a

case study in lower Chao Phraya River basin", *International Journal of Disaster Resilience in the Built Environment*, <https://doi.org/10.1108/IJDRBE-08-2021-0113>.

Somsopon, W., Kim, S.M., **Nitivattananon, V.**, Kusakabe, K. and Nguyen, T.P.L. (2022). "Issues and Needs of Elderly in Community Facilities and Services: A Case Study of Urban Housing Projects in Bangkok, Thailand", *Sustainability*, 14(14), pp. 8388.

Fang, L., Huang, J., Cai, J. and **Nitivattananon, V.** (2022). "Hybrid approach for flood susceptibility assessment in a flood-prone mountainous catchment in China", *Journal of Hydrology*, 612(128091).

Pal, I., Arboleda, J.L., **Nitivattananon, V.** and Benjachat, N. (2022). "Assessment and appraisal of local governance on urban flood resilience in Bangkok Metropolitan Region: perspectives of SDGs 11 and 13", *International Journal of Disaster Resilience in the Built Environment*, 13(3), pp. 404-417.

Chaladdee, A., Kim, S.M., **Nitivattananon, V.**, Pal, I.; Roy, J., Roachanakanan, T. (2022). "Trend Analysis of Mainstreaming Flood Risk Reduction into Spatial Planning in Thailand", *Sustainability*, 14(3), pp. 1119.

Xu, L., Cui, S., Wang, X., Tang, J., **Nitivattananon, V.**, Ding, S., Nguyen, M.N. (2021). "Dynamic risk of coastal flood and driving factors: Integrating local sea level rise and spatially explicit urban growth", *Journal of Cleaner Production*, 321, pp. 129039.

Xu, L., Ding, S., **Nitivattananon, V.**, Tang, J. (2021). "Long-Term Dynamic of Land Reclamation and Its Impact on Coastal Flooding: A Case Study in Xiamen, China". *Land*, 10 (866).

Xu, L., Cui, S., Wang, X., Tang, J., **Nitivattananon, V.**, Ding, S., Nguyen, M.N. (2021). "Dynamic risk of coastal flood and driving factors: Integrating local sea level rise and spatially explicit urban growth", *Journal of Cleaner Production*, 321, pp. 129039.

Buaban, S., **Nitivattananon, V.**, Shrestha, S., Szabo, S. (2021). "Exploring the Factors Associated with Climate-Related Issues in a Special Economic Development Zone: Application of a DPSIR Framework", *International Journal of Sustainable Development and Planning*, 16(8), pp. 1529-1540.

Jotaworn, S., **Nitivattananon, V.**, Kusakabe, K. and Xue, W. (2021). "Partnership towards Synergistic Municipal Solid Waste Management Services in a Coastal Tourism Sub-Region", *Sustainability*, 13, 397.

Xiao, D., Lu, L., Wang, X., **Nitivattananon, V.**, Guo, H. and Hui, W. (2021). "An urbanization monitoring dataset for world cultural heritage in the Belt and Road region", *Big Earth Data*, pp. 127-140.

Euanontat, M., **Nitivattananon, V.**, Sutthiprapa, N., Wongboontham, T. and Cui, S. (2021). "Local Flood Risk and Responding Adaptation in Northern Bangkok Metropolitan Region: Case of Tha Khlong Municipality", *GMSARN International Journal*, 15, pp. 277-286.

Jaroenongard, C., Babel, M.S., Shrestha, S., Weesakul, S., **Nitivattananon, V.**, Khadka, D. (2021). "Projecting Relative Sea Level Rise under Climate Change at the Phrachula Chomklao Fort Tide Gauge in the Upper Gulf of Thailand", *Water*, 13 (1702), pp. 1702-1723.

Tang, J., Li, Y., Cui, S., Xu, L., Hu, Y., Ding, S. and **Nitivattananon, V.** (2021). "Analyzing the spatiotemporal dynamics of flood risk and its driving factors in a coastal watershed of southeastern China", *Ecological Indicators*, 121, pp. 107-134.

- Fang, L., Huang, J., Zhang, Z. and **Nitivattananon, V.** (2020). "Data-driven framework for delineating urban population dynamic patterns: Case study on Xiamen Island, China", *Sustainable Cities and Society*, 62, pp. 102365.
- Naing, M. and **Nitivattananon, V.** (2020). "Key Constraints for the private house-builders contributing to the middle-income group (MIG) housing market in Yangon, Myanmar", *Journal of Construction in Developing Countries*, 25(1), pp. 83–108,
- Wijaya, N., **Nitivattananon, V.**, Shrestha, R.P. and Kim, S.M. (2020). "Drivers and Benefits of Integrating Climate Adaptation Measures into Urban Development: Experience from Coastal Cities of Indonesia", *Sustainability*, 12(2), pp. 750.
- Nitivattananon, V.** and Srinonil, S. (2019). "Enhancing coastal areas governance for sustainable tourism in the context of urbanization and climate change in eastern Thailand", *Advances in Climate Change Research*, 10(1), pp. 47-58.
- Nguyen, T. T. and **Nitivattananon, V.** (2019). "Roles and Integration of Informal Waste Sector in Municipal Solid Waste Management: The Case of Transfer Facilities in Bangkok, Thailand", *Urbana*, 20, pp. 13-23.
- Thongdejsri, M. and **Nitivattananon, V.** (2019). "Assessing impacts of implementing low carbon tourism program for sustainable tourism in a world heritage city", *Tourism Review*, 74(2), 216-234.
- Onnom, W., Tripathi, N., **Nitivattananon, V.** and Ninsawat, S. (2018). "Development of a Liveable City Index (LCI) Using Multi Criteria Geospatial Modelling for Medium Class Cities in Developing Countries", *Sustainability*, 10, pp. 520 – 538.
- Wai, A. T. P., **Nitivattananon, V.** and Kim, S. M. (2017). "Multi-stakeholder and multi-benefit approaches for enhanced utilization of public open spaces in Mandalay city, Myanmar", *Sustainable Cities and Society*, 37, pp. 323 – 325.
- Yin, M. N., **Nitivattananon, V.** and Shipin, O. V. (2017). "Green roof retrofitting: assessment of the potential for academic campus", *Engineering Journal*, 21 (7), pp. 57 – 74.
- Limthongsakul, S., **Nitivattananon, V.** and Arifwidodo, S.D. (2017). "Localized flooding and autonomous adaptation in peri-urban Bangkok", *Environment and Urbanization* 29(1), pp. 51-68.
- Tangwanichagapong, S., **Nitivattananon, V.**, Mohanty, B. and Visvanathan, C. (2017). "Greening of a campus through waste management initiatives Experience from a higher education institution in Thailand ", *International Journal of Sustainability in Higher Education*, 18(2). pp. 203 – 217.
- Bhatti, S. S., Tripathi, N. K., Nagai, M. and **Nitivattananon, V.** (2017). "Spatial interrelationships of quality of life with land use/land cover, demography and urbanization", *Social Indicators Research*, 132 (3), pp. 1193-1216.
- Nitivattananon, V.**, Klahan, D., Charoen, V. and Naing, Y. M. (2016). "Chapter 26: Underground Aqueduct and Water Tunneling Development in Thailand", in Angelakis, A. N., Chiotis, E., Eslamian, S. and Weingartner, H. (Ed), *Underground Aqueducts Handbook*, CRC Press, Taylor & Francis Group, pp. 449-461.
- Nitivattananon, V.** and Sa-nguanduan, N. (2016). "Chapter 2: Urbanization and Water Reuse", S. Eslamian (Ed), *Handbook of Water Reuse*, CRC Press, Taylor & Francis Group, pp. 12-22.
- Srichuea, S., **Nitivattananon, V.** and Perera, P. (2016). "Aging society in Bangkok and the factors affecting mobility of elderly in urban public spaces and transportation facilities", *IATSS Research* 40(1), pp. 26-34.



Kurniati, A. C. and **Nitivattananon, V.** (2016). “Factors influencing urban heat island in Surabaya, Indonesia”, *Sustainable Cities and Society* 27, pp. 99-105.

Hazarika, N. and **Nitivattananon, V.** (2016). “Strategic assessment of groundwater resource exploitation using DPSIR framework in Guwahati city, India”, *Habitat International* 51, pp. 79-89.

Thongdejsri, M., Nitisoravut, R., Kunkumdee, P., Muongpruan, C., Sangsanit, N. and **Nitivattananon, V.** (2016), “Assessment of impacts from implementing a low carbon tourism program: Case of Sukhothai City, Thailand” *6th International Conference on Tourism (ICOT2016) Proceedings*, edited by Andriotis, K., 29 June -2 July 2016, Naples, Italy, pp. 490-506.

Noi, L. V. T. and **Nitivattananon, V.** (2015). “Assessment of vulnerabilities to climate change for urban water and wastewater infrastructure management: Case study in Dong Nai river basin, Vietnam”, *Environmental Development* 16, pp. 119-137.

Sripanich, B., **Nitivattananon, V.** and Perera, R. (2015). “City development fund: A financial mechanism to support housing and livelihood needs of Thailand's urban poor”, *Habitat International*, 49, pp. 366-374.

Li, H., **Nitivattananon, V.** and Li, P. (2015). “Developing a Sustainability Assessment Model to Analyze China’s Municipal Solid Waste Management Enhancement Strategy”, *Sustainability* 7, pp. 1116-1141.

**Nitivattananon, V.**, Nitisoravut, R., Sangsanit, N., Muongpruan, C. and Kunkumdee, P. (2015), “Community-based low carbon tourism development in designated areas for promoting sustainable tourism in transitional developing countries”, *TOURAVEL '15 / Tourism and Travel Studies Conference Proceedings*, 17-19 June 2015, Istanbul, Turkey, pp. 189-204.

Suksmith, P.L. and **Nitivattananon, V.** (2015). “Aviation Impacts on Property Values and Management: The Case of Suvarnabhumi International Airport”, *IATSS Research*, 39 (1), pp. 58-71.

Htut, A.Y., Shrestha, S., **Nitivattananon, V.**, Kawasaki, A. (2014). “Forecasting Climate Change Scenarios in the Bago River Basin, Myanmar”, *J Earth Science & Climate Change*, 5(9), pp. 228.

Nitisoravut, R., Sangsanit, N., Dhiralaksh, J. and **Nitivattananon, V.** (2014). “Low Carbon Hotels towards Sustainable Tourism in Koh Chang and Neighboring Islands, Thailand”, *GMSARN International Journal*, 8(4), pp. 125 – 134.

Pumpinyo, S. and **Nitivattananon, V.** (2014). “Investigation of Barriers and Factors Affecting the Reverse Logistics of Waste Management Practice: A Case Study in Thailand”, *Sustainability*, 6, pp. 7048-7062.

**Nitivattananon, V.** and Sa-nguanduan, N. (2013). “Domestic Water Reuse Situation in the Context of Middle-income Countries: A Case Analysis”, *Frontiers in Environmental Engineering*, 2(1), pp. 7-17.

Habib, H., Anceno, A., Fiddes, J., Beekma, J., Ilyuschenko, M., **Nitivattananon, V.** and Shipin, O. (2013). “Jumpstarting strategic water resources protection from a changing global perspective: gaps and prospects in Afghanistan”, *J. of Environmental Management*, 129, pp. 244-259.

Prasertsapakij, D. and **Nitivattananon, V.** (2013). “Chapter 8: Assessment of Bangkok Metro Accessibility for Developing Integrated Strategies Using Sustainable Indicators”. In M. G. Erechtkhoukova, et al. (Eds.), *Sustainability Appraisal: Quantitative Methods and Mathematical Techniques for Environmental Performance Evaluation*, pp. 169-193.

**Nitivattananon, V.**, Lam, V. T. N., Lohpaisankrit, W. (2013). "Chapter 39: Climate Change Vulnerability Assessment: Case of Coastal Cities in South East Asia", in W. Leal Filho (Ed.), *Climate Change and Disaster Risk Management*, Springer-Verlag Berlin Heidelberg, pp. 597-614.

Klinsrisuk, R., **Nitivattananon, V.** and Wongsurawat, W. (2013). "Effective Coordination and Integration of Energy and Transport Policies for CO<sub>2</sub> Mitigation in Thailand", *Environment, Development and Sustainability*, 15(1).

Ali, G., **Nitivattananon, V.**, Mehmood, H., Sabir, M., Sheikh, S., Abbas, S. (2012) "A synthesis approach to investigate and validate carbon sources and sinks of a mega city of developing country", *Environmental Development* 4, pp. 54-72.

**Nitivattananon, V.** and Gabinete C.C. (2012). "Meta-analysis of Formal and Informal Partnerships in Solid Waste Management at the City/Municipality Level: Modalities and Potential Integral Frameworks based on Cases in Southeast Asia", *International Journal of Chemical and Environmental Engineering Systems*, 3(2), pp. 53-64.

Prasertsapakij, D. and **Nitivattananon, V.** (2012). "Evaluating accessibility to Bangkok Metro Systems using multi-dimensional criteria across user groups", *International Association of Traffic and Safety Sciences (IATSS) Research* 36(1), pp. 56-65.

**Nitivattananon, V.**, Tu, T.T., Rattanapan, A., Asavanant, J. (2011). "Chapter 31: Vulnerability and Resilience of Urban Communities under Coastal Hazard Conditions in Southeast Asia". Hoonweg, D., Freira, M., Lee, M., Bhada, P., and Yuen, B. (Eds), *Cities and Climate Change: Responding to an Urgent Agenda*, World Bank.

Ali, G. and **Nitivattananon, V.** (2012). "Exercising Multidisciplinary Approach to Assess Interrelationship between Energy Use, Carbon Emission and Land Use Change in a Metropolitan City of Pakistan", *Renewable & Sustainable Energy Reviews*, 16, pp. 775-786.

Suriyachan, C., **Nitivattananon, V.** and Amin, A.T.M.N. (2012). "Potential of decentralized wastewater management for urban development: Case of Bangkok", *Habitat International*, 36, pp. 85-92.

Tran, T. T. and **Nitivattananon, V.** (2011). "Adaptation to Flood Risks in Ho Chi Minh City, Vietnam", *International Journal of Climate Change Strategies and Management*, 3 (1), pp. 61-73.

Lay, C. and **Nitivattananon, V.** (2011). "Is Importing Second-hand Products a Good Thing? The Cases of Computers and Tires in Cambodia", *Environmental Impact Assessment Review*, 31(3), pp. 187-194.

Sa-nguanduan, N. and **Nitivattananon, V.** (2011). "Strategic Decision Making for Urban Water Reuse Application: A Case from Thailand", *Desalination* 268, pp. 141-149.

**Nitivattananon, V.** and Wijaya, N. (2010). "Benchmarking on Environmental Infrastructure Management in Selected Cities of Southeast Asia", Monograph, 62pp.

Sembering, E. and **Nitivattananon, V.** (2010). "Sustainable Solid Waste Management Toward an Inclusive Society: Integration of the Informal Sector", *Resources, Conservation & Recycling* 54 (11), pp. 759-1026.

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## Memberships/Credentials

Editorial Board member, Advances in Climate Change Research

Associate Editor, GMSARN International Journal

Editorial Board member, International Journal of Built Environment and Sustainability

Editorial Advisory Board member, Malaysian Construction Research Journal

Advisor, Committee on Environmental Management, National Municipal League of Thailand

Registered Professional Engineers of Thailand

Member, Thammasat Economic Association, Thailand