

## RESEARCH INTERESTS

1. Management of Urban Infrastructure and Services
2. Capacity Building for Environmental Management
3. Systems Analysis and Modeling for Infrastructure Development
4. Water Supply and Sanitation
5. Solid Waste Management
6. Economic Analysis and Management of Development Projects
7. Strategic Environmental and Sustainability Assessment
8. Urban Disaster and Climate Change Adaptation

## TEACHING

1. Urban Environmental Management Systems
2. Management of Urban Housing, Infrastructure and Services
3. Strategic Environmental Assessment for Urban Development
4. Sustainable Infrastructure Development in the Context of Climate Change
5. Urban Environmental Planning and Management Workshop
6. Urban Economics and Finance
7. Assessment and Implementation of Development Projects
8. Systems Analysis for Urban Environmental Management
9. Disaster Management in Urban Environmental Planning

## SELECTED PUBLICATIONS

1. Li, H., **Nitivattananon, V.** and Li, P. "Developing a Sustainability Assessment Model to Analyze China's Municipal Solid Waste Management Enhancement Strategy", *Sustainability*, In-press.
2. 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.
3. Suksmith, P.L. and **Nitivattananon, V.** "Aviation Impacts on Property Values and Management: The Case of Suvarnabhumi International Airport", *IATSS Research*, In-press.

4. Nitisoravut, R., Sangsnit, 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.
5. Pumpinyo, S. and **Nitivattananon, V.** (2013). "Investigation of Barriers and Factors Affecting the Reverse Logistics of Waste Management Practice: A Case Study in Thailand", *Sustainability*, 6, pp. 7048-7062.
6. **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.
7. 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.
8. Prasertsapakij, D. and **Nitivattananon, V.** (2013). "Chapter 8: Assessment of Bangkok Metro Accessibility for Developing Integrated Strategies Using Sustainable Indicators", M.G. Erechtkhoukova et al. (Eds), *Sustainability Appraisal: Quantitative Methods and Mathematical Techniques for Environmental Performance Evaluation*, EcoProduction.
9. Klinsrisuk, R., **Nitivattananon, V.** and Wongsurawat, W. (2013). "Effective Coordination and Integration of Energy and Transport Policies for CO2 Mitigation in Thailand", *Environment, Development and Sustainability*, 15(1).
10. **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.
11. 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, pp. 56-65.
12. **Nitivattananon, V.**, Tu, T.T., Rattanapan, A., Asavanant, J. (2012). "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.
13. 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.

14. 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.
15. 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.
16. 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.
17. Sa-nguanduan, N. and **Nitivattananon, V.** (2011). "Strategic Decision Making for Urban Water Reuse Application: A Case from Thailand", *Desalination* 268, pp. 141-149.
18. **Nitivattananon, V.** and Wiajaya, N. (2010). "Benchmarking on Environmental Infrastructure Management in Selected Cities of Southeast Asia", Monograph, 62pp.
19. **Nitivattananon, V.**, Yusuf, M.A., Permada, A.S. and Lloyds, I. (2010). Eds: "Experiences and Lessons Learned for Future Urban Environmental Management drawn from SEA-UEMA Project Final Partners Workshop", CIDA-AIT Partnership (2003-1010), Urban Environmental Management Field of Study, Asian Institute of Technology.
20. Sembiring, 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.
21. Maeda, T., Sujaritpong, S and **Nitivattananon, V.** (2009). "Study of Low-cost and Low-tech Nightsoil and Wastewater Treatment Systems in Thailand" In Kitakyushu Initiative Research, Institute for Global Environmental Strategies (IGES), 64pp.
22. Sujaritpong, S. and **Nitivattananon, V.** (2009). "Factors Influencing Wastewater Management Performance: Case of Housing Estates in Suburban Bangkok, Thailand", *Journal of Environmental Management* 90, pp. 455-465.
23. **Nitivattananon, V.** and Nguyen, T. C. H. (2008). "Benchmarking on environmental infrastructure management in selected cities of Southeast Asia", *Proceedings of International Cities, Towns & Communities (ICTC) Society 2008*, Sydney, Australia.
24. Sembiring, E. and **Nitivattananon, V.** (2008). "Integration of Social Welfare into Optimization Model of Solid Waste Systems", *Proceedings of International Conference on Environmental Research and Technology*, Bandung, Indonesia
25. Suttibak, S. and **Nitivattananon, V.** (2008). "Assessment of factors influencing the performance of solid waste recycling programs", *Resources Conservation & Recycling* 53 (1), pp. 45-56.

26. Yakupitiyage, A., **Nitivattananon, V.**, Shipin, O., Thakur, D. and Bhatiyasevi, U. (2008). Assessing Capacity for Effective Coastal Management in Thailand (Chapter). In: *An assessment of capacity for effective coastal management in Asia*. Report for the Mangroves for the Future (MFF) Initiative of the International Union for Conservation of Nature and Natural Resources (IUCN).
27. **Nitivattananon, V.** and Noonin, C. (2008). "Thailand urban environmental management: cases of environmental infrastructure and housing provision in Bangkok Metropolitan Region", in *Vulnerable Cities: Realities, Innovations and Strategies*, Kidokoro, J., Okata, J, Matsumura, S. and Shima, N. (Eds), Springer, Japan, 187-208.
28. **Nitivattananon, V.**, Rattanussorn, M, Plang-ngern, S. and Sorpimai, K. (2008). "Management Options of Concrete Waste Utilization in Bangkok Metropolitan Region", *Proceedings of International Conference on Waste Engineering and Management*, Hong Kong SAR.
29. Suttibak, S. and **Nitivattananon, V.** (2008). "Assessment of Waste Recycling Performance: a Study of School Garbage Banks in Thailand", *GMSARN International Journal*. Vol. 2, No. 3, pp. 83-90.
30. **Nitivattananon, V** and Borongan, G. H. (2007). "Construction and Demolition Waste Management: Current Practices in Asia", *International Conference on Sustainable Solid Waste Management*, 5-7 September, Chennai, India.
31. Chan, N. W. and **Nitivattananon, V.** (2007) "The Role of Gender in Domestic Water Conservation in Malaysia", *Malaysian Journal of Environmental Management*, July, 8 (2007): 109-129.
32. Velez, G. and **Nitivattananon, V** (2007). "Partnership with Jeepney Associations in Managing Vehicle Emissions: Case Study of Davao City, Philippines, *Asian Planning Schools Association Conference (APSA) 2007*, 27-29 August, Colombo, Sri Lanka.
33. **Nitivattananon, V.** and Hanaoka, S. (2007). "Regional Study on Sustainable Infrastructure Development in Asia", in *Sustainable Infrastructure in Asia – Overview and Proceedings*, ESCAP, 2007, United Nations Publication, ISBN: 978-92-1-120507-7, pp. 1-84.
34. Sujaritpong, S. and **Nitivattananon, V.** (2006). "An Assessment of Community Wastewater Management Performance", *Proceedings of the Fourth International Symposium on Southeast Asia Water Environment*, 6-8 December 2006, pp. 33-40.
35. Sa-nguanduan, N. and **Nitivattananon, V.** (2006). "Sustainable Urban Water Management System: Review of Status with Focus on Southeast Asian Countries", *Proceedings of Regional Conference on Urban Water and Sanitation in Southeast Asian Cities*, 22-24 November, 2006, pp. 235-249.
36. Pruksuriya, A. and **Nitivattananon, V.** (2006). "Infrastructure for Disaster Management: Case of Water Supply and Sanitation in Tsunami Affected Communities, Southern

Thailand”, *Proceedings of 5th International Symposium on New Technology for Urban Safety of Mega Cities in Asia*, 16-17 November 2006.

37. Coowanitwong, N., Shapkota, P., Pradhan, P., and **Nitivattananon, V.** (2006). Eds; *Proceedings of International Conference on Integrated Solid Waste Management in Southeast Asia Cities*, pp.1-269, ISBN 974-8257-34-7.
38. Chan, N. W. and **Nitivattananon, V.** (2006) “Effective Management of Water Resources via Demand Management: Some Examples from Southeast Asia”. *Proceedings of IHP International Symposium on Managing Water Supply for Growing Demand*, Bangkok, Thailand, 16-20 October 2006. Jakarta, UNESCO: IHP Technical Documents in Hydrology No 8, pp. 23-38.
39. Thanaprayochsak, W., A. T. M. N. Amin and **Nitivattananon, V.** (2005). “Application of Economic Instruments to Influence People’s Decision in Choice of Transportation Mode for Reducing Growth Rate of Vehicles in Bangkok”, *Proceedings of Asian Planning Schools Association Conference (APSA) 2005*, Penang, Malaysia.
40. Spoann, Vin, **Nitivattananon, V.** and Amin, A. T. M. N. (2005). “Assessment of Solid Waste Collection Contracted Service in Siem Reap, Cambodia”, *Proceedings of International Conference on Integrated Solid Waste Management in Southeast Asia Cities*, Siem Reap, Cambodia.
41. **Nitivattananon, V.**, Tasingsa, S. and Ludwig, H.F. (2004). “Planning for the Management of Conflicting Water Uses in Thailand Watersheds: A Case Study,” *Proceedings of 30th WEDC International Conference*, Vientiane, Lao PDR.
42. **Nitivattananon, V.** and Gauger, R. (2004), “Enhancing Efficiency of Local Government Authorities for Solid Waste Management Facilities”, *Proceedings of International Solid Waste Association (ISWA) 2004 World Environment Congress*, Rome, Italy.
43. **Nitivattananon, V.** and Ludwig, H.F. (2004). “Guidelines for Allocating Air Pollution Assimilative Capacity for Industrial Areas Located in Major Industrial Region”, *Proceedings of Better Air Quality (BAQ) 2004*, Agra, India.
44. Krairapanond, N., Tasingsa, S. and **Nitivattananon, V.** (1999). “Watershed Characterization and Water Resources Assessment: A Case of Huai Mae Tia Watershed, Chiang Mai, Northern Thailand,” *Proceedings of Civil and Environmental Engineering Conference*, Bangkok, Thailand.
45. **Nitivattananon, V.**, Sadowski, E.C. and Quimpo, R.G. (1996). “Optimization of Water Supply System Operation,” *Journal of Water Resources Planning and Management*, American Society of Civil Engineers (ASCE), Vol. 122, No. 5, Sep., 1996, pp. 374-384.
46. Sadowski, E. C., **Nitivattananon, V.** and Quimpo, R.G. (1995). “Computer - Generated Optimal Pumping Schedule,” *Journal American Water Works Association*, AWWA, Vol. 87, No. 6, Jul., 1995, pp. 53-63.

## DOCTORAL RESEARCH SUPERVISION

1. Enhancing Local Capacity on Solid Waste Separation and Recycling (*completed in 2009*)
2. Optimization of Solid Waste Management incorporating Socio-economic Aspects (*completed in 2010*)
3. Assessment of Impacts from Second-hand Products in Cambodia (*completed in 2010*)
4. Development of Strategic Decision Making System for Urban Wastewater Reuse Applications (*completed in 2011*)
5. Wastewater Management for Sustainable Urban Development (*completed in 2011*)
6. Assessment of Accessibility in Urban Public Transport (*completed in 2012*)
7. Effective Coordination and Integration of Energy and Transport Policies for CO<sub>2</sub> Mitigation (*completed in 2013*)
8. Integrated Assessment of Energy, Carbon and Remote Sensing in Urban Climate Change (*completed in 2013*)
9. Environmental Policy for Noise Management: A Case of Suvarnaphumi International Airport (*completed 2014*)
10. Reverse Logistics for Waste Management (*completed 2014*)
11. Integrated Assessment for Climate Impacts and Adaptation in Coastal Cities' Infrastructure (*on-going*)
12. Assessment of Accessibility in Public Urban Space to support Aging Society (*on-going*)
13. Evaluation of Upscaling Community-based Housing Finance to City Level (*on-going*)
14. Development of Good Practices on Solid Waste Separation for Recycling Programs (*on-going*)
15. Enhancing the Co-benefits of Urban Waste Management (*on-going*)
16. Developing a Model for Integrated Evaluation of Municipal Waste Management (*on-going*)
17. Climate Change Adaptation and Urban Development in Southeast Asia (*on-going*)

## ONGOING AND COMPLETED PROJECTS

1. Development of a Feasibility Study for the Regional Ecolabelling Cooperation, 2015-2016, supported by UNEP
2. International Climate Initiative (ICI) 2010\_Vulnerability and Adaptation to Climate Change in Coastal Cities of Southeast Asia, 2011-2014, supported by ICI
3. Development of Community-based Low Carbon Tourism, 2013-2014, supported by Designated Area for Sustainable Tourism Administration (DASTA)
4. Measuring the Influence of Sound Material Society in Thailand, 2013-2014, supported by SUMITOMO Foundation
5. A Study of Post-Consumer Carton Composition in Waste and Recycling Study, 2010-2011, supported by Tetra Pak Co., Ltd.

6. Strategic Environmental Assessment (SEA) for Spatial Planning and Capacity Development for Sustainable Tourism in the Golden Quadrangle Development Area of Greater Mekong Sub-region, 2009-2011, supported by ADB
7. Evaluation of TIPMSE Programs as a Tool to Support Decision Making for Promoting Waste Recycling System in Thailand, 2008-2010, supported by Thailand Institute of Packaging Management for Sustainable Environment (TIPMSE)
8. Southeast Asia Urban Environmental Applications Project, 2004-2010, supported by CIDA
9. Construction Waste Characterization and Management Options, 2006-2008, supported by SCG Co., Ltd.

#### **AWARDS AND HONORS**

1. Editorial Advisory Board member, International Journal of Built Environment and Sustainability
2. Editorial Advisory Board member, Malaysian Construction Research Journal
3. Advisor, Committee on Environmental Management, National Municipal League of Thailand

#### **PROFESSIONAL AFFILIATIONS**

1. Member, Asian Planning Schools Association
2. Member, International Cities, Town Centres & Communities Society
3. Member, International Solid Waste Association
4. Registered Professional Engineers of Thailand
5. Member, Thammasat Economic Association, Thailand

#### **RESEARCH KEYWORDS**

1. Urban Environmental Management
2. Management of Infrastructure and Services
3. Waste Recycling and Systems Management
4. Water Engineering and Management
5. Economic and Environmental Sustainability Assessment
6. Climate Change Risk Assessment and Adaptation