

CURRICULUM VITAE
Keishiro Hara, Ph.D.

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Current Position

Associate Professor and Director of Future Design Section
Center for Open Innovation Research and Education (COiRE)
Graduate School of Engineering, Osaka University

Employment

April 2016 - Present: Associate Professor, Graduate School of Engineering, Osaka University
(On leave between October 2016 and March 2018 to take policy position at Ministry of Economy, Trade and Industry, the Government of Japan)
April 2011 - : Associate Professor, Center for Environmental Innovation Design for Sustainability, Osaka University
April 2009 - : Associate Professor, Research Institute for Sustainability Science, Osaka University
Aug 2006 - : Assistant Professor, Research Institute for Sustainability Science, Osaka University
April 2004- : Researcher, Institute of Global Environmental Strategies

Policy Position

October 2016 - March 2018: Senior Officer for Technology Policy and Strategy, Manufacturing Industries Bureau, Ministry of Economy, Trade and Industry (METI), the Government of Japan

Adjunct Position

April 2017 - Present: Consulting Fellow, Research Institute of Economy, Trade and Industry (RIETI)
June 2019 - Present: Senior Fellow, Tokyo Foundation for Policy Research
April 2019 - Present: Collaborative researcher, Research Institute for Humanity and Nature

Education

March 2004: Ph.D. Environmental Studies, The University of Tokyo
March 2001: M.A. Environmental Studies, The University of Tokyo
March 1999: B.A. Engineering, The University of Tokyo

June – Aug 2002: Young Scientist, International Institute for Applied Systems Analysis (IIASA), Young Scientist Summer Program (YSSP)
June – Sep 2003: Visiting doctoral student, Chalmers University of Technology

(Selected for Academic Frontiers Student Exchange Promotion Program by Ministry of Education, Culture, Sports, Science and Technology, Government of Japan)

Professional activities

Vice Chairman, Future Design Subcommittee, Science Council of Japan (January 2018 -)

Member, Science Council of Japan (December 2017 -)

International Panel of Experts, Belmont forum (2017)

Member, Future Design Project, The Tokyo Foundation for Policy Research (September 2018 -)

Editorial board, *Sustainability Science* (2013- present)

Editorial member, *Journal of Japan Society on Water Environment* (2015- present)

Honors and Awards

Fuji Electric Prize, Society of Environmental Science, Japan, 2016

Paper of Editors' Choice, *Environmental Development* (Elsevier) (Co-authored), 2014

Osaka University Presidential Awards for Outstanding Contribution in Research, 2014

Excellence in presentation, EcoDesign 2011 (Co-authored), EcoDesign Japan 2012

Member, International Waste Working Group, 2010

Top reviewer award for 2009, *Waste Management* (Elsevier), 2009

Research Interests

Future Design, Sustainability Science, Environmental and Energy Policy, Environmental Engineering, Technology Policy and Innovation

Referee Services

Applied Energy; Sustainable Cities and Society; Habitat International; Energy Efficiency; Energy Policy; Environmental Research; Environmental Development; Desalination and Water Treatment; Journal of Cleaner Production; Sustainability; International Journal of Automation Technology; American Society of Mechanical Engineers(ASME), IDETC/CIE; Resources, Conservation and Recycling; Journal of Material Cycles and Waste Management; Energies; International Journal of Energy and Environmental Engineering; Journal of Geography and Regional Planning; Energy Conversion and Management; Cities; Journal of Industrial Ecology; Journal of Hazardous Materials; Waste Management; Frontiers of Environmental Science & Engineering in China; Sustainability Science; Journal of Environmental Management; Environment, Development and Sustainability; Journal of Environmental Information Science; Journal of Global Environmental Engineering; Journal of Life Cycle Assessment, Japan (日本 LCA 学会誌) ; The Economic Review(経済研究); Global Environmental Engineering Research (地球環境研究論文集); Environmental System Research (環境システム研究)

Selected Publication (Journal papers)

- Hara, K., Yoshioka, R., Kuroda, M., Kurimoto, S and Saijo, T (2019) Reconciling intergenerational conflicts with imaginary future generations - Evidence from a participatory deliberation practice in a municipality in Japan, *Sustainability Science*, Forthcoming
- Tateyama Y, Kurasawa K, Hirayama M, Kurashiki T and Hara K (2019) Analysis of Future Design Workshop on Disaster Prevention from the Perspective of Time Orientation, *Engineering Education* (in Japanese), Forthcoming
- Tateyama Y, Kurasawa K, Hirayama M, Kurashiki T and Hara K (2019) Risk Communication Based on Future Design, *Journal of the Society of Materials Science, Japan*, Vol. 68 (in Japanese)
- Kuroda, M., Hara, K., Takekawa, M., Uwasu, M and Ike, M (2018) Historical trends of academic research on the water environment in Japan: Evidence from the academic literature in the past 50 years, *Water*, Vol.10(10), 1456
- Kishita Y, Uwasu M, Hara K, Kuroda M, Takeda H, Umeda Y, Shimoda Y (2018) Toward Designing Sustainability Education Programs—A Survey of University Curricula through Semi-structured Interviews, *Sustainability Science*, Vol. 13(4), pp. 953-972
- Tamura M, Onuki, M, Sekiyama, M, Hara, K, Uwasu, M, Tsuji, N, Ishimura G, Tanaka N, Mori A, Mino T (2018) Developing Joint Educational Programs in Sustainability Science across Different Universities - A Case Study from Japan, *Sustainability Science*, Vo.13 (3), pp 849–860
- Tateyama Y, Kurasawa K, Kurashiki T and Hara K (2018) Validation of an integrated approach of future design and scenario planning— a case study of disaster prevention workshop, (in Japanese), *Engineering Education*, Vol.66, No.2, pp.42-47
- Han, J., Liang, H., Hara, K and Uwasu, M (2018) Quality of Life in China's Largest City: A 20-Year Subjective and Objective Composite Assessment, *Journal of Cleaner Production*, Vol 173 (1), pp. 135-142
- Hara, K (2017) Sustainability trend in China and prospects of assessment methodology, *Sustainability Science*, Vol. 12 (6), pp 887–890
- Nomaguchi, Y., Tanaka, H., Sakakibara, A., Fujita, K., Kishita, Y., Hara, K., Uwasu, M (2017) Designing Scenarios on Linked Planning of Subsidy Systems and Power Grids toward Building Distributed Energy System – Case Study of PV Diffusion in Mishima Area, Osaka, *Energy*, Vol 140, Part 1, pp. 779-793
- Kumazawa, T., Hara, K., Endo, A., Taniguchi, M (2017) Supporting Collaboration in Interdisciplinary Research of Water-Energy-Food Nexus by Means of Ontology Engineering, *Journal of Hydrology: Regional Studies*, Vol. 11, pp. 31-43
- Tsuda, K., Uwasu, M., Hara, K and Fuchigami, Y(2017) Approaches to induce behavioral

changes with respect to electricity consumption, *Journal of Environmental Studies and Sciences*, Vol7, Issue 1, pp 30–38

- Nomaguchi, Y., Kawakami, K., Fujita, K., Kishita, Y., Hara, K and Uwasu, M (2016) Robust Design of System of Systems using Uncertainty Assessment based on Lattice Point Approach: Case Study of Distributed Generation System Design in a Japanese Dormitory Town, *International Journal of Automation Technology*, Vol.10 No.5 pp. 678-689
- Fuchigami, Y., Hara, K., Uwasu, M and Kurimoto S (2016) Analysis of the Mechanism Hindering Sustainable Forestry Operations: A Case Study of Japanese Forest Management, *Forests*, Vol. 7(8), 182
- Hara, K., Kuroda, K, Yabar, H., Kimura, M and Uwasu, M (2016) Historical development of wastewater and sewage sludge treatment technologies in Japan – A patent data analysis over the past 50 years, *Environmental Development*, Vol.19, pp. 59-69
- Kishita, Y., Ohishi, Y., Uwasu, M., Kuroda, M., Takeda, H and Hara, K (2016) Evaluating the Life Cycle CO₂ Emissions and Costs of Thermoelectric Generators for Passenger Automobiles - a Scenario Analysis, *Journal of Cleaner Production*, Vol. 126, pp. 607–619
- Hara, K., Kumazawa, T., Kimura, M and Tsuda, K (2016) Participatory approach in vision setting: Emerging initiatives in local municipalities in Japan, *Sustainability Science*, Vol. 11 (3), pp. 493-503
- Fuchigami, Y., Hara, K., Uwasu, M and Kurimoto S (2016) Analysis of effect on CO₂ emission reduction for the use of Bio-coke: A case study of Osaka, Japan, *Journal of Wood Science*, Vol 62, Issue 1, pp 93-100
- Kishita, Y, Hara, K., Uwasu, M and Umeda, Y (2016) Research Needs and Challenges Faced in Supporting Scenario Design in Sustainability Science: A Literature Review, *Sustainability Science*, Vol. 11, No. 2, pp. 331-347
- Suzuki, M., Ikeda, K., Kusago, T., Hara, K., Uwasu, M and Tyunina, O (2015) Analysis of Citizen's Priorities over Sustainable Development Goals in Japan - Evidence from a Questionnaire Survey, *Global Environmental Research*, Vol 19 (2) pp.155-164
- Hara, K., Uwasu, M., Kishita Y and Takeda, H (2015) Determinant factors of residential consumption and perception of energy conservation: Time-series analysis by large-scale questionnaire in Suita, Japan, *Energy Policy* Vol.87, pp. 240-249
- Uwasu, M., Hara, K., and Kobayashi, H. (2014) Analysis of Energy Consumption Patterns and Climate Effects Using Panel Data, *International Journal of Automation Technology*, Vol.8, No.5, pp.626-633
- Uwasu M, Hara K, Yabar H (2014) World Cement Production and Environmental Implications, *Environmental Development*, Vol. 10, pp. 36–47
- Tsuda, K., Low, B.H., Takahashi, H., Hara, K., Uwasu, M and Umeda, Y (2014) Potential

Accounting of Regional Biomass Resource Circulations in Japan: A Prospective on Regional Rural-Urban Partnerships, *Environmental Development*, Vol. 9, pp. 24-42

- Hara, K., Uwasu, M., Kurimoto, S., Yamanaka, S., Umeda, Y and Shimoda Y (2013) Mapping Research Activities and Technologies for Sustainability and Environmental Studies - a Case Study at University Level, *Journal of Environmental Studies and Sciences*, Vol.3 (1). pp. 42-48
- Tsuda, K., Hara, K and Uwasu, M (2013) Prospects and Challenges for Disseminating Life Cycle Thinking towards Consumers' Environmental Conscious Behaviors, *Sustainability*, Vol.5(1), 123-135
- Kumazawa, T., Kozaki, K., Matsui, T., Saito O., Ohta M., Hara, K., Uwasu, M., Kimura, M and Mizoguchi R (2014) Initial Design Process of the Sustainability Science Ontology for Supporting Co-deliberation, *Sustainability Science*, Vol. 9 (2), pp. 173-192
- Uwasu, M., Naito, T., Yabar, H and Hara, K (2013) Assessment of Japanese Recycling Policies for Home Electric Appliance: Cost-effectiveness Analysis and Socioeconomic and Technological Implications, *Environmental Development*, Vol. 6, pp. 21-33
- Yabar, H., Uwasu, M and Hara, K (2013) Tracking environmental innovations and policy regulations in Japan: case studies on dioxin emissions and electric home appliances recycling, *Journal of Cleaner Production*, Vol.44, pp. 152-158
- Hara, K., Uwasu, M., Kobayashi, H., Kurimoto, S., Yamanaka, S., Shimoda, Y and Umeda, Y (2012) Enhancing Meso Level Research in Sustainability Science – Challenges and Research Needs, *Sustainability*, Vol. 4. pp.1833-1847
- Kumazawa, T., Uwasu, M, Hara, K., Kimura, M and Saito, O (2012) Designing collaborative approach among experts in an interdisciplinary research project – case study on Sustainability Science, *Papers on Environmental Information Science*, Vol.26, pp.165-170, Center for Environmental Information Science (In Japanese)
- Yabar, H., Hara, K. and Uwasu M (2012) Comparative Assessment of the co-evolution of environmental indicator systems in Japan and China, *Resources, Conservations and Recycling*, Vol.61, pp.43-51
- Uwasu, M., Hara, K., Yabar, H and Zhang, H (2012) Analysis of energy productivity and determinant factors: a case study of China' provinces, *Journal of Sustainable Development*, Vol.5, No.6. pp.1-9
- Hara, K and Yabar, H. (2012) Historical Evolution and Development of Waste Treatment and Recycling Systems: Analyses of Japan's Experiences, *Journal of Environmental Studies and Sciences*, Vol. 2 (4), pp. 296-307
- Zhang, H., Uwasu, M., Hara, K., and Yabar, H. (2011) Sustainable Urban Development and Land Use Change - A Case Study of the Yangtze River Delta in China, *Sustainability*, Vol. 3 (7) pp. 1074-1089

- Hara, K., Yabar, H., Uwasu, M and Zhang, H (2011) Energy Intensity Trends and Scenarios for China's Industrial Sectors — a Regional Case Study, *Sustainability Science*, Vo. 6 (2) pp.123-134
- Zhang, H., Uwasu, M., Hara, K., and Yabar, H. (2010) Land use Change Patterns and Sustainable Urban Development in China, *Journal of Asian Architecture and Building Engineering*, Vol. 9 (1) pp.131-138
- Zhang, H., Hara, K., Yabar, H., Yamaguchi Y., Uwasu, M and Morioka, T. (2009) Comparative analysis of socio-economic and environmental performances for Chinese EIPs: case studies in Baotou, Suzhou and Shanghai, China, *Sustainability Science*, Vol.4 (2), pp. 263-279
- Uwasu, M., Yabar, H., Hara, K., Shimoda, Y and Saijo T. (2009). Educational Initiative at Osaka University in Sustainability Science: Mobilizing Science and Technology towards Sustainability, *Sustainability Science*, Vol.4 (1) pp. 45-53
- Hara, K., Uwasu, M., Yabar, H and Zhang, H (2009) Sustainability Assessment with Time-Series Scores – A Case Study of Chinese Provinces, *Sustainability Science*, Vol.4 (1) pp. 81-97
- Yabar, H., Hara, K., Uwasu, M., Yamaguchi, Y., Zhang, H., and Morioka, T. (2009) Integrated Resource Management towards a Sustainable Asia: Policy and Strategy Evolution in Japan and China, *International Journal of Environmental Technology and Management*, Vol.11 (4) pp239 - 256, Inderscience Publishers
- Yabar, H., Hara, K., and Zhang, H (2008) Impacts of Environmental Policy on technological innovations: Case Study in Japan, *Papers on Environmental Information Science*, No.22, pp.37-42, Center for Environmental Information Science
- Zhang, H., Uwasu, M., Hara, K., Yabar, H., Yamaguchi, Y., and Murayama, T. (2008) Analysis on land use changes and environmental loads during urbanization in China, *Journal of Asian Architecture and Building Engineering*, Vol. 7 (1), pp109-115
- Hara, K., and Mino, T. (2008) Evaluation of Sewage Sludge Recycling Options and Management System in Tokyo, *Waste Management*, Vol.28 (12), pp.2645-2652
- Hara, K. (2006) Groundwater Contamination and Quality Management Policy in Asia, *International Review for Environmental Strategies*, Vol. 6 (2) 291 - 306
- Hara K., Sato H. and Mino T. (2002). Analysis of Energy Consumption in Sludge Treatment and Recycling Processes in the Tokyo Area, *Environmental Systems Research*, Vol.30, pp.371-378, Japan Society of Civil Engineers (in Japanese)

Other Publications (In Japanese)

- Hara, K., Mikami, K (2019) Policy Challenges and Prospects for Manufacturing in Japan in the Era of Digitalization, *Design Engineering* Vol.54, No.7

- Hara , K (2018) Roles of Imaginary Future Generations — Evidence from Participatory Future Design Deliberation Practices, *Trends in the Sciences*, Vol 23, No.6 pp.13-15
- Uwasu, M and Hara K (2017) Non-point Source Pollution Control and Public Engagement: A Case Study of US, *Gyoseiho-Kenkyu*, Vol.18, pp109-120
- Hara, K., Saijo, T (2017) Future Design – Evidence and Insights from Participatory Deliberations, *Journal of Japan Society on Water Environment*, Vol.40 (4), pp. 112-116
- Hara K (2016) Methodology and Practice of Meso Level Research – Bridging Technology Seeds and Future Visions, *Journal of Environmental Conservation Engineering*, Vol. 45 (10) , No. 10, pp. 508–514
- Hara, K (2016) Participatory Future Design in Pursuit of Sustainability, *Design Engineering*, Vol.51, No.5, pp. 297 – 302
- Hara, K (2016) Comment: Future Design – Visioning in collaboration with virtual future generations and practices in local municipalities, Vo.12, No.1, pp.64-71, *Journal of Public Affairs*
- Hara, K (2016) Practices and governance for participatory vision setting in pursuit of a sustainable society- Evidences from three municipalities, *Gyoseiho-Kenkyu*, Vol.12, pp.49-63
- Hara, K (2014) Meso level research in pursuit of a sustainable society – research needs and challenges, *Design Engineering*, Vol. 49, No.7, pp. 337 – 344
- Hara, K (2014) Methodology of Sustainability Assessment and Application to Meso Level Research, *Policy Science*, Vol.21 (3), pp. 117-132
- Hara, K (2013) Environmental innovation design through a strategic linkage between research seeds and visions – Theoretical framework and approaches, *The Journal of Science Policy and Research Management*, Vol.28 (2), pp. 185-195
- Hara, K (2008) Urban Sustainability and Environment, in Public Policy Studies Association (Eds), *Journal of Public Policy Studies*, Vol.8 pp74-86

Book editor

- 池道彦 原圭史郎編著 (2016) 『想創技術社会』 大阪大学出版会
- 原圭史郎 梅田靖 編 (2011) 『サステイナビリティ・サイエンスを拓く - 環境イノベーションへ向けて』 大阪大学出版会

Book Chapters

- Hara, K (2017) Future Design for Sustainable Water Resource Use from the Perspective of Ground Water Management, in “Toward a Sustainable Society: Incorporating Preferences of Future Generations for Sustainability”, Saijo T (Ed), Springer (Forthcoming)

- 原圭史郎 (2015) 地下水管理問題から考える水資源利用とフューチャーデザイン『フューチャーデザイン』西條辰義 編、pp. 197-217 勁草書房 (ISBN-13: 978-4326550739)
- Hara, K. (2014) Water Security and Management towards Regional Sustainability – Lessons from Ground Water Management practices in Asia in “Strategic Adaptation towards Water Crisis and IWRM” Nakagami, K., Choudhury, G.A, Jianhua, L and Fukushi, K (Eds), University Press Limited, pp. 31-44 (ISBN :978 984 506 133 9)
- Hara, K (2013) Urban Development and its Impacts on Energy and Resource Consumptions in the Yangtze River Delta –Trends and Future Prospects in “Yangtze River: Geography, Pollution and Environmental Implications”, Tracy B. Maloney and Boyce R. Hutchins (Eds), pp. 121-128, Nova Science Publishers, N.Y, (ISBN: 978-1-62618-286-8)
- Hara, K and Yabar, H (2011) Recycling Technologies and Policies towards a Sound-Material Cycle Society in Japan- Case Study of Containers and Packages, in “Recycling, Cost and Benefits” Charlene J. Nielsen (Ed), pp.259-270, Nova Science Publishers, N.Y. (ISBN 978-1-61209-507-3)
- Uwasu M., Kimura, M., Hara, K., Yabar, H and Shimoda Y. (2011) Practices and Barriers in Sustainability Education: A Case Study of Osaka University, in “Sustainability Science: A Multidisciplinary Approach” Komiyama, H., Takeuchi, K, Shiroyama, H and Mino, T (Eds), pp. 399-408, United Nations University Press, ISBN 978-92-808-1180-3
- Hara, K (2011) Indicators System as an Instrument for Establishing Sustainable Resource-Circulating Societies, in “Establishing a Resource-Circulating Society in Asia - Challenges and Opportunities” Morioka, T., Hanaki, K., and Moriguchi, Y (Eds), pp.52–73, United Nations University Press. (ISBN 978-92-808-1182-7)
- Yabar, H., Zhang H., and Hara, K (2011) Research Networking on Resource-circulation Initiatives in Asia, in “Establishing a Resource-Circulating Society in Asia - Challenges and Opportunities” Morioka, T., Hanaki, K., and Moriguchi, Y (Eds), pp.86-100, United Nations University Press. (ISBN 978-92-808-1182-7)
- Hara, K., Uwasu, M., Shimoda, Y and Umeda, Y(2011) Synthesis of Research and Technology Seeds at Osaka University – a Discussion for Advancing Sustainability Research, in “Design for Innovative Value Towards a Sustainable Society, Proceedings of EcoDesign 2011: 7th International Symposium on Environmentally Conscious Design and Inverse Manufacturing” M. Matsumoto, Y. Umeda, K. Masui, and S. Fukushige (Eds), Springer, ISBN: 978-94-007-3010-6, pp.576-581
- Hara, K. (2010) Groundwater Use and Associated Social Impacts: Challenges in Asian Cities, in “Water Shortages: Environmental, Economic and Social Impacts” Andrew C. Briggs (Ed), pp. 143-157, Nova Science Publishers, N.Y, ISBN: 978-1-61728-309-3
- Hara, K (2009) Sewage Sludge Treatment and Recycling Systems in Japan: Trends,

Challenges and Future Perspectives, in “Sludge: Types, Treatment Processes and Disposal”, Richard E. Baily (Ed), pp. 289-296, Nova Science Publishers, N.Y. (ISBN: 978-1-60741-842-9)

- IGES Freshwater Resources Management Project (Eds) (2007) “Sustainable Groundwater Management in Asian Cities: A final report of Research on Sustainable Water Management Policy,” Institute for Global Environmental Strategies. (ISBN: 4-88788-039-9)
- 津田和俊・原圭史郎・Low Bi Hong (2011) “都市農村連携の可能性と未来像” 『都市・農村連携と低炭素社会のエコデザイン』所収, pp44-50, 技報堂出版 (ISBN-13: 978-4765534482)

Selected Conference Proceedings papers (including peer-reviewed articles)

- Uwasu M, Hara, K (2016) Non-point Source Pollution Control and Public Engagement: A Case Study of US, International Symposium on Public Participation and Access to Justice in Environmental Matters, Osaka, Nov 3-4
- Hara, K (2016) Future Design - Participatory deliberation by creating virtual future generations for sustainability, 2016 HDCA(Human Development and Capability Association) Conference, September 1–3, 2016, Tokyo
- Michikawa, T., Moriwaki, K., Yabuki, N., Fukuda, T., Hara, K and Kurimoto, S (2015) Automatic extraction of roadside trees from MMS data using minimum spanning tree, The 9th International Symposium on Mobile Mapping Technology (MMT 2015), Dec 9-11, Sydney, Australia
- Hara, K., Yoshioka, T., Kuroda, M., Kurimoto, S and Saijo, T (2015) Participatory deliberation for future design by creating imaginary future generations - Evidence from an experimental workshop in Yahaba Town, Iwate, Japan, Proceedings of EcoDesign 2015 International Symposium, pp. 72-74, Tokyo, Dec 2-4
- Hara, K., Saijo, T., Kurimoto, S., Kishita, Y., Uwasu, M and Fuchigami, Y (2015) Will people’s perceptions and judgements change in view of future generations? - Evidence from a questionnaire survey, Proceedings of EcoDesign 2015 International Symposium, pp. 105-107, Tokyo, Dec 2-4
- Yabar, H., Uwasu, M and Hara, K (2015) The Promotion and Diffusion of Environmental Innovations: Streamlining the Dissemination Mechanisms, Proceedings of EcoDesign 2015 International Symposium, pp. 198-201, Tokyo, Dec 2-4
- Nomaguchi, Y., Kawakami, K., Fujita, K., Kishita, Y., Hara, K., Uwasu, M (2015) Study on “System of Systems” Design Method with Uncertainty Assessment based on Robust Optimality - Case Study of Distributed Energy System Design in Mishima Area, Osaka, Proceedings of EcoDesign 2015 International Symposium, pp. 85-90, Tokyo, Dec 2-4

- Uwasu, M., Kishita, Y., Hara, K., Shen, J., Kuroda, M., Takeda, H and Saijo, T (2015) Future design - How to create future generations in visioning? , Proceedings of EcoDesign 2015 International Symposium, pp. 67-71, Tokyo, Dec 2-4
- Suzuki, M., Kusago, T., Ikeda, K., Hara, K., Uwasu, M and Tyunina, O (2015) Identification of Key Sustainable Development Goals and Indicators: Results of a Questionnaire Survey Conducted in the US, Japan and Thailand, Global Cleaner Production & Sustainable Consumption Conference (Nov 1- 4, 2015) Barcelona, Spain
- Kuroda, M., Hara, K., Takekawa, M., Uwasu, M and Ike, M (2015) Historical trends of water-related research and technologies over the past 50 years in Japan, The 6th IWA-ASPIRE Conference and Exhibition, Beijing, China, 20 – 24 September, 2015
- Suzuki, M., Kusago, T., Ikeda, K., Hara, K., Uwasu, M and Tyunina, O (2015) What Are the Citizens' Priorities over Sustainable Development Goals in Thailand? : Evidence from a Questionnaire Survey, Proceedings of Sustainable Development Conference 2015, 18 pages, (July 5 – 7, 2015) Bangkok, Thailand
- Kumazawa T, Matsui T, Hara K and Kurimoto S (2015) Collaborative approach to assessment of social-ecological systems based on ontology engineering, 15th Biannual Global Conference, International Association for the Study of the Commons, 25 pages, Alberta, Canada, May 25-29
- Tsuda, K., Makino, H., Hara, K and Uwasu, M (2014) Potential Self Supply of Local Resources towards Regional Sustainability: Case Study of Shinjo Village in Okayama prefecture, Japan, Proc. of EcoBalance 2014, P-039, Tsukuba, Japan, Oct 27-30 (poster)
- Fuchigami, Y., Hara, K., Kita, T., Uwasu, M and Kurimoto, S (2014) Analysis of environmental loads and benefits of a Bio-coke production factory: a case study in Osaka, Proc. of EcoBalance 2014, P-088, Tsukuba, Japan, Oct 27-30 (poster)
- Kishita, Y., Ohishi, Y., Uwasu, M., Kuroda, M., Takeda, H and Hara, K (2014) Evaluating the Greenhouse Gas Emissions and the Life Cycle Cost of Thermoelectric Generators for Passenger Automobiles, Proc. of EcoBalance 2014, P-082, Tsukuba, Japan, Oct 27-30 (poster)
- Kuroda, M., Takekawa, M., Hara, K, Uwasu, M and Ike, M (2014) Analysis of historical trends of water research and technologies in Japan since 1960's, The IWA World Water Congress & Exhibition, Lisbon, Sep 21- 26 (Poster)
- Hara, K., Kumazawa, T., Tsuda, K and Kimura, M (2014) Managing regional natural resources in the context of rural-urban partnerships – Case studies of local areas in Japan, Asian Rural Sociology V (Vo.1), pp. pp.85-90, 5th International Conference of the Asian Rural Sociological Association (ARSA), Vientiane, Sep 2-5.
- Fuchigami, Y., Kurimoto, S., Uwasu, M and Hara, K (2014) Transition in the role of forestry in the local community: a case of Nakahata in Osaka, Japan, Asian Rural Sociology V

(Vo.1), pp. 154-160, 5th International Conference of the Asian Rural Sociological Association (ARSA), Vientiane, Sep 2-5.

- Kishita, Y., Ohishi, Y., Uwasu, M., Kuroda, M., Takeda, H and Hara, K (2014) Assessing the greenhouse gas emissions and cost of thermoelectric generators for passenger automobiles – a life cycle perspective, Proceedings of the ASME 2014 International Design Engineering Technical Conferences & Computers and Information in Engineering Conference, IDETC/CIE 2014, 19th Design for Manufacturing and the Life Cycle Conference (DFMLC), DETC2014-34483, (2014), 9 pages. New York, Aug 17-20
- Uwasu, M., Han Ji., Hara, K (2014) Analyzing subjective wellbeing and its determinants: a case study in Shanghai, ISEE(International Society for Ecological Economics) conference 2014, pp. 412, Aug 13-15, Reykjavik, Iceland
- Takeda, H., Kurashige Y., Hara, K and Kaga, A (2014) Methodology of City Analysis for Evaluating Compactness using GIS, Proceedings of the 19th International Conference of the Association of Computer-Aided Architectural Design Research in Asia (CAADRIA 2014), pp. 243-252, Kyoto, May 14-17
- Suzuki, M., Kusago, T., Hara, K., Ikeda, K., Uwasu, M and Kanie, N (2014) Conducting a Survey on Citizen's Views and Priorities over Sustainable Development Issues and Agenda for the post-MDGs era, Side event of the Nexus 2014: Water, Food, Climate and Energy Conference, March 3-7
- Hara, K., Kimura, M., Kumazawa, T., Kuroda, M and Uwasu, M (2013) Historical Trends of Research on “Sound Material-Cycle Society” in Japan – Evidences from a Database, Proceedings of Ecodesign2013 - 8th International Symposium on Environmentally Conscious Design and Inverse Manufacturing, O-P-6 (6 pages), Jeju, Korea, Dec 4-6
- Hara, K., Takeda, H., Uwasu, M and Kishita, Y (2013) Public perceptions and behavioral patterns of energy savings – a randomized household survey in Suita city, Japan, Proceedings of Ecodesign2013 - 8th International Symposium on Environmentally Conscious Design and Inverse Manufacturing, O-C-7 (4pages), Jeju, Korea, Dec 4-6
- Fuchigami, Y., Kurimoto, S., Uwasu, M and Hara, K (2013) Prospects for Forestry in Japan: Balancing Profitability and Work Efficiency, Proceedings of Ecodesign2013 - 8th International Symposium on Environmentally Conscious Design and Inverse Manufacturing, P-A-2 (5 pages), Jeju, Korea, Dec 4-6
- Takeda, H., Kurashige Y., Hara, K and Kaga, A (2013) Proximity and Accessibility for Evaluating Compactness in Urban Design - Case Studies of Cities in Japan, Proceedings of Ecodesign2013 - 8th International Symposium on Environmentally Conscious Design and Inverse Manufacturing, P-K-2(6 pages), Jeju, Korea, Dec 4-6
- Kuroda, M., Takekawa, M., Hara, K, Uwasu, M and Ike, M (2013) Historical evolutions and innovations of water related technologies in Japan – Evidences from journal papers published

over the last 50 years, Proceedings of Ecodesign2013 - 8th International Symposium on Environmentally Conscious Design and Inverse Manufacturing, O-L-2 (6 pages), Jeju, Korea, Dec 4-6

- Yabar, H., Uwasu, M and Hara, K (2013) The International Diffusion of Knowledge: Environmental Innovations and their Dissemination across Asian Nations, Proceedings of Ecodesign2013 - 8th International Symposium on Environmentally Conscious Design and Inverse Manufacturing, O-B-3 (4 pages), Jeju, Korea, Dec 4-6
- Tanaka, H., Nomaguchi, Y., Fujita, K., Kishita, Y., Hara, K., Uwasu, M., Kuroda, M and Takeda, H (2013) Designing Diffusion Scenarios of Distributed Energy Systems Based on Multi Agent Simulation – A Case Study of Suita City, Proceedings of Ecodesign2013 - 8th International Symposium on Environmentally Conscious Design and Inverse Manufacturing, O-C-8 (6 pages), Jeju, Korea, Dec 4-6
- Tsuda, K., Uwasu, M., Hara, K., and Fuchigami, Y (2013) How does energy visualization contribute to sustainability? – a comprehensive review, Proceedings of Ecodesign2013 - 8th International Symposium on Environmentally Conscious Design and Inverse Manufacturing, P-D-4 (4 pages), Jeju, Korea, Dec 4-6
- Uwasu, M., Hara, K and Kobayashi, H (2013) Energy consumption patterns and policy implications, Proceedings of Ecodesign2013 - 8th International Symposium on Environmentally Conscious Design and Inverse Manufacturing, O-O-4 (5 pages), Jeju, Korea, Dec 4-6
- Kishita, Y., Ohishi, Y., Uwasu, M., Kuroda, M., Takeda, H and Hara, K (2013) Life Cycle Assessment of Thermoelectric Modules for a sustainable Society, Proceedings of Ecodesign2013 - 8th International Symposium on Environmentally Conscious Design and Inverse Manufacturing, O-J-13 (6 pages), Jeju, Korea, Dec 4-6
- Hara, K (2013) How pollution abatement technologies evolved in Japan? - Case studies of water purification and solid waste treatment technologies, The 16th Academic Exchange Seminar between Osaka University and Shanghai Jiao Tong University, Oct 23, Osaka University
- Hara, K (2013) Policies, governance and management for groundwater resources – Cases in urban areas of Asian cities, The 14th Global Biennial Conference of the International Association for the Study of the Commons, Kitafuji (Japan), June 2013, 13 pages.
- Hara, K (2013) Water related problems, well-being and sustainability status – a sustainability assessment in China's provinces, 3rd International Conference on Sustainability Science, Canberra, Feb 2013
- Ji Han, Hanwei Liang, Keishiro Hara and Michinori Uwasu (2012) A Multidimensional Assessment of Quality of Life: Case Study of Shanghai, China, Proceedings of 10th International Conference of EcoBalance (EcoBalance2012), CD-ROM. A2-04, 4 pages,

Yokohama Nov 20-23

- Yabar, H., Uwasu, M and Hara, K (2012) Tracking the Impact of Environmental Regulations on Development and Diffusion of Innovations: Evidence from Waste Management Technologies in Japan, Proceedings of 10th International Conference of EcoBalance (EcoBalance2012), CD-ROM. A1-10, 4 pages, Yokohama Nov 20-23
- Benjamin C. McLellan, Keishiro Hara, Michinori Uwasu (2012) Sustainability communication in the life cycle - gates and gaps, Proceedings of 10th International Conference of EcoBalance (EcoBalance2012), CD-ROM. D1-03, 4 pages, Yokohama Nov 20-23
- Hara, K., Kumazawa T., Uwasu, M and Yabar, H (2012) Sustainability Indicator System with Visualized Causal-links Information - Application of Ontology and a Case Study, Proceedings of 10th International Conference of EcoBalance (EcoBalance2012), CD-ROM. A2-05, 4 pages, Yokohama Nov 20-23
- Tsuda, H., Hara, K and Uwasu M (2012) Research challenges and needs for disseminating life cycle thinking towards consumers' environmental conscious behaviors, Proceedings of 10th International Conference of EcoBalance (EcoBalance2012), CD-ROM. P123, 4 pages, Yokohama Nov 20-23
- Uwasu, M., Hara, K., Yabar, H and Zhang, H (2012) Application of a Sustainable Indicator System for the Assessment of Chinese Sustainable Development, Proceedings of 10th International Conference of EcoBalance (EcoBalance2012), CD-ROM. A2-06, 4 pages, Yokohama Nov 20-23
- Susant, I., Hara, K., Uwasu, M and Tokai A (2012) Application of System Dynamics Model for Energy Policy Analysis at Local Governmental Level - a Review and Case Study, *Proceedings of 40th Annual Meeting of Environmental Systems Research 2007*, Vol. 40, pp. 339-348, Japan Society of Civil Engineers, Wakayama
- Tsuda, K., Hara, K and Uwasu (2012) Supply-Demand Balances of Food and Energy in Mountainous Rural Areas to Help Ensuring Regional Sustainability, Proceedings of 8th International Conference on LCA in the Agri-Food Sector, pp.909-910, Rennes, France, Oct
- Hara, K., Uwasu, M and Kurimoto, S (2012) Vision-meso-seeds" model towards sustainability transition – Concepts and research agenda, Abstract Book of Proceedings of the 3rd International Conference on Sustainability Transitions, pp.109-110, Copenhagen, Denmark, Aug
- Kishita, Y., Hara, K., Uwasu, M and Umeda, Y (2012) Framework of Integrated Scenario Design: An Approach to Meso Level Research for Sustainability Transition, Abstract Book of Proceedings of 3rd International Conference on Sustainability Transitions, pp. 40, Copenhagen, Denmark, Aug
- Hara K (2012) Groundwater Management and Regional Sustainability – Evidences of Asian

Cities, 3rd International Conference on Sustainability Science, pp. 56-57, Jan 2012, Bali

- Kobayashi, H., Uwasu M., Hara, K. and Umeda, Y (2011) A Framework for Comprehensive Sustainability Research by Focusing on the Meso-level, in “Design for Innovative Value Towards a Sustainable Society, Proceedings of EcoDesign 2011: 7th International Symposium on Environmentally Conscious Design and Inverse Manufacturing” M. Matsumoto, Y. Umeda, K. Masui, and S. Fukushige (Eds), Springer, ISBN: 978-94-007-3010-6, pp. 570-575
- Hara, K., Uwasu, M., Shimoda, Y and Umeda, Y(2011) Synthesis of Research and Technology Seeds at Osaka University – a Discussion for Advancing Sustainability Research, in “Design for Innovative Value Towards a Sustainable Society, Proceedings of EcoDesign 2011: 7th International Symposium on Environmentally Conscious Design and Inverse Manufacturing” M. Matsumoto, Y. Umeda, K. Masui, and S. Fukushige (Eds), Springer, ISBN: 978-94-007-3010-6, pp. 576-581
- Kishita, Y., Hara, K and Uwasu, M (2011) Integrated Scenario Design for Sustainability Research – Concept, Framework and Challenges, in “Design for Innovative Value Towards a Sustainable Society, Proceedings of EcoDesign 2011: 7th International Symposium on Environmentally Conscious Design and Inverse Manufacturing” M. Matsumoto, Y. Umeda, K. Masui, and S. Fukushige (Eds), Springer, ISBN: 978-94-007-3010-6, pp. 582-587
- Uwasu, M., Hara, K., Yabar, H and Zhang, H (2011) Scenario analysis of cement production in China- the role of policy and technology in the pathway to sustainable society, in “Design for Innovative Value Towards a Sustainable Society, Proceedings of EcoDesign 2011: 7th International Symposium on Environmentally Conscious Design and Inverse Manufacturing” M. Matsumoto, Y. Umeda, K. Masui, and S. Fukushige (Eds), Springer, ISBN: 978-94-007-3010-6, pp. 592-597
- Yabar, H., Uwasu, M., Hara, K.(2011) How policies stimulate innovations along the lifecycle of products– Evidences from dioxin emissions and electric home appliances recycling, in “Design for Innovative Value Towards a Sustainable Society, Proceedings of EcoDesign 2011: 7th International Symposium on Environmentally Conscious Design and Inverse Manufacturing” M. Matsumoto, Y. Umeda, K. Masui, and S. Fukushige (Eds), Springer, ISBN: 978-94-007-3010-6, pp. 190-193
- Tsuda, K, Hara, K and Uwasu, M (2011) Designing Supply-Demand Relationships of Food and Renewable Energy for Ensuring Regional Sustainability: Case Study of Shinjo Village, Okayama, Japan, in “Design for Innovative Value Towards a Sustainable Society, Proceedings of EcoDesign 2011: 7th International Symposium on Environmentally Conscious Design and Inverse Manufacturing” M. Matsumoto, Y. Umeda, K. Masui, and S. Fukushige (Eds), Springer, ISBN: 978-94-007-3010-6, pp. 11-14
- Uwasu, M., Naito, T., Yabar H and Hara, K (2011) How policy instruments for household

electric appliances recycling have economic and technological implications: a case study of Japan, Proceedings of International Symposium on Materials Science and Innovation for Sustainable Society (Eco-Mates 2011), Vol.1, pp.11-12, Nov 2011, Osaka

- Zhang, H., Uwasu, M and Hara, K (2011) The Assessment Framework of the “returning-farmland-to-forestland” Policies – a Case Study of Loess Plateau in Shaanxi Province, China, Proceedings of 39th Annual Meeting of Environmental Systems Research 2011, Vol. 39, pp.269-274, Japan Society of Civil Engineers, Tokyo, Oct 2011
- Yabar, H., Uwasu, M and Hara, K (2011) Evaluation of the Linkages between Environmental Policy and Innovation: Case Study in Waste Management Technologies in Japan, Innovation and Sustainability Transition in Asia, 8 pages, Kuala Lumpur, Malaysia, January, 2011
- Hara, K., Uwasu, M., Zhang, H and Yabar, H (2010) Energy Intensity Analysis and Visions for Development of Sustainable Industrial Systems - Case Study of the Yangtze River Delta Region, China, Proceedings of 9th International Conference on EcoBalance 2010, pp. 697-700 (Tokyo, Nov 2010)
- Uwasu, M., Hara, K, Zhang, H and Yabar, H (2010) Analysis of Energy Productivity in China, Proceedings of 9th International Conference on EcoBalance 2010, pp.96-99 (Tokyo, Nov 2010)
- Yabar, H., Uwasu, M and Hara, K (2010) Exploring the Benefits of Environmental Policy on Innovation and Market Behavior: the Japanese Experience in Dealing With Waste Management, Proceedings of 9th International Conference on EcoBalance 2010, pp. 166-169 (Tokyo, Nov 2010)
- Tsuda, K., Low, B.H., Hara, K., Nakakubo, T., Kishita, Y and Umeda Y (2010) Scenario Analysis of Sustainable Society based on Urban-Rural Partnerships in Japan, Proceedings of 9th International Conference on EcoBalance 2010, pp. 829-832 (Tokyo, Nov 2010)
- Hara, K., Uwasu, M, Yabar, H and Zhang, H (2010) Analysis of Factors for Energy Intensity Shifts: Evidence from the Yangtze River Delta Region in China, ISIE Asia-Pacific Conference, Tokyo, Nov. 2010 CD-ROM
- Uwasu, M., Yabar, H and Hara, K (2010) Analysis of country level cement production, ISIE Asia-Pacific Conference, Tokyo, Nov. 2010, CD-ROM
- Hara, K (2010) Scenario Making and Roadmap for Better Industrial Systems in 2020 – A Regional Study in China, 35th Annual meeting, Society for Social Studies of Science, Tokyo, Aug 2010
- Zhang, H., Uwasu, M., Hara, K and Yabar, H (2009) Proposing a network model for sustainable land use and urban development in Yangtze River Delta, Proceedings of 6th International Symposium on Environmentally Conscious Design and Inverse Manufacturing (EcoDesign 2009), pp. 587-590, Dec 2009, Sapporo, Japan
- Kazutoshi Tsuda, Hayato Takahashi, Toyohiko Nakakubo, Keishiro Hara and Yasushi

Umeda (2009) Framework of Regional Partnership between Rural and Urban Area toward the Low Carbon Society, International Conference on Sustainability Science 2009 (ICSS2009), University of Tokyo, 6 February 2009

- Kumazawa, T., Kozaki, K., Matsui, T., Saito, O., Ohta, M., Hara, K., Uwasu, M., Yamaguchi, Y., Yamamoto, Y and Mizoguchi, R (2009) Development of Ontology on Sustainability Science Focusing on Building a Resource-circulating Society in Asia, Proceedings of 6th International Symposium on Environmentally Conscious Design and Inverse Manufacturing (EcoDesign 2009), pp.571-576, Dec 2009, Sapporo, Japan
- Yabar, H., Uwasu, M., Hara, K and Zhang H (2009) Scenarios to Design a Resource-circulating Society in Asia – Case Study in Yangtze Delta Industrial Sector, Proceedings of 6th International Symposium on Environmentally Conscious Design and Inverse Manufacturing (EcoDesign 2009), pp.565-570, Dec 2009, Sapporo, Japan
- Hara, K., Yabar, H and Zhang, H (2009) Indicator Systems for Designing Sustainable Societies in Asia, Proceedings of 6th International Symposium on Environmentally Conscious Design and Inverse Manufacturing (EcoDesign 2009), pp 559-564, Dec 2009, Sapporo, Japan
- Hara, K., Yabar, H., Uwasu, M and Zhang H (2009) Scenario Designs and Strategies towards Energy-efficient Industrial Societies - a Regional Study in China, Proceedings of International Conference on Sustainability, Human Geography and Environmental Studies, pp.130-137, Imperia, Italy
- Zhang, H., Uwasu, M., Hara, K and Yabar, H (2009) Impact of Human geography transformation on urban sustainability – case study in Yangtze River Delta, Proceedings of International Conference on Sustainability, Human Geography and Environmental Studies, pp. 113-122, Imperia, Italy
- Zhang, H., Uwasu, M., Hara, K, and Yabar, H (2009) Land use and sustainable urban development in Yangtze River Delta, Proceedings of Sustainability Transition - International Research Initiatives towards Resource-circulating Societies pp131-134, July 2009, Osaka, Japan
- Hara, K, Yabar, H and Anupam Khajuria (2009) Waste Management and Recycling Systems in Japan: a Review of Containers and Packaging Wastes, International Conference on Recycling and Reuse of Materials (ICRM), 4 pages, July 2009, Kottayam, Kerala, India (Upon invitation)
- Hara, K., Yabar, K., Uwasu, M., Zhang, H., Kumazawa, T and Morioka, T (2009) Future Scenario Approach for Building a Resource-Circulating Society in the East Asia, IHDP Open Meeting 2009, 7th International Science Conference on the Human Dimension of Global Environmental Change, 15 pages, April 2009, Bonn, Germany
- Zhang, H., Hara, K., Uwasu, M., and Yabar, H. (2008) Urban sustainable development and

the land use in China, The 8th International Conference on EcoBalance, pp.668- 671, December 2008, Tokyo

- Kumazawa, T., Matsui, T., Hara, K., Uwasu, M., Yamaguchi, Y., Yamamoto Y., Kozaki, K., Saito, O., and Mizoguchi, R. (2008) Knowledge Structuring Process of Sustainability Science based on Ontology Engineering, Proceedings of the 8th International Conference on EcoBalance, pp. 409-412, December 2008, Tokyo
- Yabar, H., Uwasu, M., Hara, K., Zhang H., and Kumazawa, T (2008) Visioning the future: Sustainability pathways and indicators based on the capital approach, Proceedings of the 8th International Conference on EcoBalance, pp. 158-161, December 2008, Tokyo
- Hara, K., Uwasu, M., Yabar H., Zhang, H., and Morioka, T (2008) A Method for Measuring Sustainability with Integrated Scores: Application to Asian cities, Proceedings of the 8th International Conference on EcoBalance, pp.150-153, December 2008, Tokyo
- Zhang, H., Hara, K., Uwasu, M., and Yabar, H. (2008) Urban Sustainable Development and Land Use Change in Shanghai, Suzho and Huzhou, China, Proceedings of the 7th International Symposium on Architectural Interchange in Asia (ISAIA), pp 298-302, October 2008, Beijing
- Uwasu, M., Hara, K., Yabar, H., and Zhang H. (2008) Time series sustainability scores for China's provinces, International Society for Ecological Economics 2008 Nairobi, 21pgs, August 2008, Nairobi, Kenya
- Hara, K., Yabar, K., Yamaguchi, Y., Uwasu, M., Zhang, H., and Kumazawa, T (2008). Designing Future Scenarios towards a Desirable Resource-Circulating Society: Case Study in the Yangtze Delta Region, The 2008 Berlin Conference on the Human Dimensions of Global Environmental Change, G5, pp1-13, Feb 2008, Berlin, Germany
- Morioka, T., and Hara, K (2007). Towards a Sustainable Society with Sound Material/Resources Circulation in the East Asia, Proceedings of International Symposium on Regional Development of the Yangtze River Delta, Dec 2007, Shanghai, China
- Yabar, H., Hara, K., Uwasu, M., Yamaguchi, Y., Murayama, T., Zhang, H., and Morioka, T. (2007) Strategies towards a Resource-circulating Asia: Design of a Sustainability Assessment Framework, *Proceedings of 5th International Symposium on Environmentally Conscious Design and Inverse Manufacturing*, OS1-3, pp.1-8, the Union of EcoDesigners, Dec 2007, Tokyo, Japan
- Yamaguchi, Y., Takahashi Y., Hara, K., Yabar, H., Saito, O., and Morioka, T .(2007) Transition Management Model with Back-casting Approach: Case Studies of the Development of a Low Carbon Society, *Proceedings of 5th International Symposium on Environmentally Conscious Design and Inverse Manufacturing*, OS1-1, pp.1-9, the Union of EcoDesigners, Dec 2007, Tokyo, Japan
- Zhang, H., Hara, K., Yamaguchi, H, Saito, O., and Morioka, T (2007) Analysis on Eco-

Industrial Park for promoting Circular Economy in China -Comparative study in Shanghai, Suzhou and Baotou, *Proceedings of 35th Annual Meeting of Environmental Systems Research 2007*, Vol. 35, pp.129-134, Japan Society of Civil Engineers

- Hara, K., Saito, O., Yabar, H., Yamaguchi Y., and Morioka, T (2007). Building Future Scenarios toward Resource-Circulating Society – Case Study in Yangtze River Delta, *Proceedings of 35th Annual Meeting of Environmental Systems Research 2007*, Vol. 35, pp.123-128, Japan Society of Civil Engineers