

CURRICULUM VITAE

Keishiro Hara, Ph.D.

<https://www.cfi.eng.osaka-u.ac.jp/hara/en/>

Last Updated: 12/2025

Current Position

Professor and Co-director,

Center for Future Innovation (CFi), Graduate School of Engineering, The University of Osaka
Director, *Hara Research Base for Future Design*, Center of Excellence in Advanced Research,
TechnoArena, Graduate School of Engineering, The University of Osaka

Employment

- 10/2019 Professor, Graduate School of Engineering, Osaka University
- 04/2016 Associate Professor, Graduate School of Engineering, Osaka University
- 04/2011 Associate Professor, Center for Environmental Innovation Design for Sustainability, Osaka University
- 04/2009 Associate Professor, Research Institute for Sustainability Science, Osaka University
- 08/2006 Assistant Professor, Research Institute for Sustainability Science, Osaka University
- 04/2004 Researcher, Institute of Global Environmental Strategies

Policy Position

- 10/2016 - 03/2018 Senior Officer for Technology Policy and Strategy, Manufacturing Industries Bureau, Ministry of Economy, Trade and Industry (METI), the Government of Japan

Adjunct Position

- 2019- Adjunct Professor, Research Center for Behavioral Economics, Institute of Socio-Economic Research, The University of Osaka
- 2017- Consulting Fellow, Research Institute of Economy, Trade and Industry (RIETI)
- 2019- Senior Fellow, The Tokyo Foundation for Policy Research
- 2019-2020 Collaborative researcher, Research Institute for Humanity and Nature

Education

- 2004 Ph.D., Environmental Studies, The University of Tokyo
- 2001 Master, Environmental Studies, The University of Tokyo
- 1999 B.A., Engineering, The University of Tokyo

- 06-08/2002 Young Scientist, International Institute for Applied Systems Analysis (IIASA)
- 06-09/2003 Visiting doctoral student, Chalmers University of Technology (Academic Frontiers Student Exchange Promotion Program by MEXT, Government of Japan)

Professional activities

2023-	Chair, <i>Kinki</i> Regional Committees on Energy Supply and Demand and Prevention of Global Warming (Chair, Future Design Subcommittee, 2024-)
2022-	Board member, Sustainability Science Consortium
2021-	Board of Directors, Society of Environmental Science, Japan
2021-	Vice chairman, Committee of Industry and Technology Promotion, The Osaka Chamber of Commerce and Industry
2021	Co-Chair, Executive Committee, EcoDesign2021
2018-2020	Vice Chairman, Future Design Subcommittee, Science Council of Japan
2017-2020	Member, Science Council of Japan
2017	International Panel of Experts, Belmont forum
2018-	Member, Future Design Project, The Tokyo Foundation for Policy Research
2013-	Editorial board, <i>Sustainability Science</i>
2015-	Editorial member, <i>Journal of Japan Society on Water Environment</i>

Honors and Awards

2025	Year 2024 Best Paper Award (Shared with co-authors), Japan Society for Research Policy and Innovation Management
2024	Osaka University Prize (Shared with management team of Cross-Boundary Innovation Program at Osaka University)
2021	Fellow, The Engineering Academy of Japan
2021	PI, <i>Hara Research Base for Future Design</i> , Center of Excellence in Advanced Research, TechnoArena, Graduate School of Engineering, Osaka University
2016	Fuji Electric Award (SES Environmental Research Proposal Award) , Society of Environmental Science, Japan
2014	Paper of Editors' Choice , <i>Environmental Development</i> (Elsevier) (Co-authored)
2014	Osaka University Presidential Awards for Outstanding Contribution in Research
2012	Excellence in presentation , EcoDesign 2011 (Co-authored), EcoDesign Japan
2010	Member, International Waste Working Group
2009	Top reviewer award , <i>Waste Management</i> (Elsevier)

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; Futures; Environmental Research; Environmental Development; Desalination and Water Treatment;

Journal of Cleaner Production; Sustainability; International Journal of Sustainable Transportation; 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 (Peer-reviewed papers)

- Fuchigami Y, Ikenaga T, Kuroda M, Hara K (2025) [Thinking from the Perspective of Imaginary Future Generations Changes the Public Perception of Sustainable Management of Water Supply Infrastructure – A Large-scale Questionnaire Survey in a Municipality of Japan](#), *Futures*, 175, 103709, 2026
- Hara K, Ikenaga T, Arai T, Fuchigami Y (2025) [Policy Design and Decision Criteria for Sustainable Water Supply from the Perspective of “Imaginary Future Generations” - A Deliberation Experiment with Policymakers in a Municipality, Japan](#), *Futures*, In press, 103618
- Hara K, Fuchigami Y, Nomaguchi Y, Kurashiki T, Eguchi M (2025) [Evaluation Criteria for R&D adopting “Imaginary Future Generations”— A Deliberation Experiment in an Engineering Company](#), *Futures*, 166, 103542
- Hara K, Arai T, Liao Z, Ifuku N, Suzuki M(2025) [Designing Research and Development Strategies for Sustainable Supply Systems of Rare Metals from the Perspective of “Imaginary Future Generations” – A Participatory Deliberation Experiment](#), *Journal of Cleaner Production*, 486, 144445
- Fujita K, Kurashiki T, Hara K, Ikeda J, Nakamura T (2025) [Analysis of the Effects of Adopting “Imaginary Future Generations” on the Design of Technology Development and Business Proposal: Case Study of Workshop at a Plating Processing Company](#), In: Fukushige, S., Nonaka, T., Kobayashi, H., Tokoro, C., Yamasue, E. (eds) *EcoDesign for Circular Value Creation: Volume I*, Springer, 277–291
- Fuchigami Y, Sugita N, Hara K, Uwasu M (2025) [Analysis of factors promoting the implementation of interdisciplinary research based on the research orientation of university researchers](#), *The Journal of Science Policy and Research Management*, 40(1), 108-126 (In Japanese)
- Uwasu M, Kuroda M, Fuchigami Y, Hara K (2024) [Time framing and SDGs: can imaginary future generations alter people's perception and attitude?](#) *International Journal of Automation Technology*, 18(6), 747-753
- Hara K, Fuchigami Y, Arai T, Nomaguchi Y (2024) [Compatible Effects of Adopting Imaginary Future Generations and Systems Thinking in Exploring Future Challenges - Evidence from a Deliberation Experiment](#), *Futures & Foresight Science*, 6(4), e191
- Uwasu M, Hara K, Kuroda M, Han Ji (2024) [Assessing the spatiotemporal dynamics of environmental](#)

[sustainability in China](#), *Sustainability*, 16(13), 5322

- Hara K, Miura I, Suzuki M, Tanaka T (2024) [Assessing Future Potentiality of Technologies from the Perspective of “Imaginary Future Generations” – a Case Study of Hydrothermal Technology](#), *Technological Forecasting and Social Change*, 202, 123289 ([Press released](#))
- Fujita K, Kurashiki T, Hara K, Nakamura T, Ikeda J (2024) [Analysis of the Impacts of External Evaluation and the Lasting Effects of Future Design Workshop](#), *Journal of JSEE*, 72(5), 5_2 - 5_9 (In Japanese)
- Fuchigami Y, Hara K, Kurashiki T, Takeda H (2024) [Educational Efficacy of an OJE \(One the Job Education\)-based Practical Group Exercise](#), *Journal of JSEE*, 72(5), 5_35 - 5_39 (In Japanese)
- Hara K, Nomaguchi Y, Fukutomi S, Kuroda M, Fujita K, Kawai Y, Fujita M, Kobashi T (2023) [Policy Design by “Imaginary Future Generations” with Systems Thinking - a Practice by Kyoto City towards Decarbonization in 2050](#), *Futures*, 103272
- Hara K, Kuroda M, Nomaguchi Y (2023) [How does Research and Development \(R&D\) Strategy Shift by Adopting Imaginary Future Generations? - Insights from Future Design Practice in a Water Engineering Company](#), *Futures*, 152, 103221
- Hara K, Naya M, Kitakaji Y, Kuroda M, Nomaguchi Y (2023) [Changes in Perception and the Effects of Personal Attributes in Decision-making as Imaginary Future Generations – Evidence from Participatory Environmental Planning](#), *Sustainability Science*, 18, 2453-2467
- Hara K, Miura I, Suzuki M and Tanaka T (2023) [Designing Research Strategy and Technology Innovation for Sustainability by Adopting “Imaginary Future Generations” –A Case Study Using Metallurgy](#), *Futures & Foresight Science*, 5(3-4), e163
- Nomaguchi Y, Senoo R, Fukutomi S, Hara K, Fujita K(2023) [Utilization method and effect evaluation of systems thinking in Future Design: Comparative analysis of policy-making workshops in local governments](#), *International Journal of Automation Technology*, 17(2), 183-193
- Fujita K, Tanahara W, Kurashiki T, Hara K, Ikeda J, Nakamura K (2023) [A Study on the Effectiveness of Workshops for Proposition of Sustainable Business Based on Future Design](#), *Proceedings of the Japan Conference on Structural Safety and Reliability 2023*, 301-307 (in Japanese)
- Hosomi T, Kondo G, Wakamoto K, Hara K, Kurashiki T (2023) [Analysis of the effectiveness of adopting Future Design on new business proposals from the perspective of future generations - A case study of a company](#), *The Journal of Science Policy and Research Management*, ,38(1), 113-129 (in Japanese) [[2024 Best Paper Award](#), Japan Society for Research Policy and Innovation Management]
- Tasaki T, Kameyama Y, Masui T, Takahashi K, Tsurumi T, Hara K, Hotta Y, Koide R (2023) [Evolution of Sustainability Science in the Era of the Anthropocene](#), *Environmental Science*, 36(2), 53-82 (In Japanese)
- Hosomi T, Kondo G, Wakamoto K, Hara K, Kurashiki T (2022) [Proposal of a Method for Searching Latent Needs in the Food Field based on Future Design](#), *The Journal of Science Policy and Research Management*, 37 (1), 63-77 (In Japanese)
- Hiromitsu T, Kitakaji Y, Hara K and Saito T, [What do people say when they become “future people”? –Positioning Imaginary Future Generations \(IFGs\) in general rules for good decision making](#), *Sustainability*, 13(12), 6631, 2021
- Hara K, Kitakaji Y, Sugino H, Yoshioka R, Takeda H, Hizen Y and Saito T (2021) [Effects of Experiencing](#)

[the Role of Imaginary Future Generations in Decision-Making - a Case Study of Participatory Deliberation in a Japanese Town, *Sustainability Science*, 16\(3\), 1001-1016](#)

- Kuroda M, Uwasu M, Bui X.T, Nguyen P.D, and Hara K (2021) [Shifting the Perception of Water Environment Problems by Introducing “Imaginary Future Generations, *Futures*, 126, 102671](#)
- Kobashi T, Yoshida T, Yamagata Y, Naito K, Pfenninger S, Say K, Takeda Y, Ahl A, Yarime M, Hara K (2020) [On the Potential of “Photovoltaics + Electric vehicles” for Deep Decarbonization of Kyoto’s Power Systems: Techno-Economic-Social Considerations, *Applied Energy*, 275, 115419](#)
- Peter Hoffmann, Yutaka Nomaguchi, Keishiro Hara, Kana Sawai, Ingenuin Gasser, Myriam Albrecht, Benjamin Bechtel, Jana Fischereit, Kikuo Fujita, Philine Gaffron, Markus Quante, Jürgen Scheffran, K. Heinke Schlünzen, Malte von Szombathely (2020) [Multi-Domain Design Structure Matrix approach applied to Urban System Modeling, *Urban Science*, 4\(2\), 28](#)
- Uwasu M, Kishita Y, Hara K and Nomaguchi Y (2020) [Citizen-participatory Scenario Design Methodology with Future Design Approach: A Case Study of Visioning for Low-Carbon Society in Suita City, Japan, *Sustainability*, 12\(11\), 4746](#)
- Hara, K., Yoshioka, R., Kuroda, M., Kurimoto, S and Saito, T (2019) [Reconciling intergenerational conflicts with imaginary future generations - Evidence from a participatory deliberation practice in a municipality in Japan, *Sustainability Science*, 14\(6\), 1605-1619](#)
- 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, *Journal of JSEE* \(in Japanese\), 67\(3\), 3_14-3_20](#)
- 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*, 68 \(3\), 265-270 \(In Japanese\)](#)
- 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*, 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*, 13\(4\), 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*, 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, *Journal of JSEE*, 66 \(2\), 42-47 \(in Japanese\)](#)
- 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*, 173 \(1\), 135-142](#)
- Hara, K (2017) [Sustainability trend in China and prospects of assessment methodology, *Sustainability Science*, 12 \(6\), 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*, 140 \(1\), 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*, 11, 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*, 7\(1\), 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*, 10\(5\), 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*, 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*, 19, 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*, 126, 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*, 11 \(3\), 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*, 62 \(1\), 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*, 11\(2\), 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*, 19 \(2\), 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 Saitama, Japan, *Energy Policy*, 87, 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*, 8\(5\), 626-633](#)
- Uwasu M, Hara K, Yabar H (2014) [World Cement Production and Environmental Implications, *Environmental Development*, 10, 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*, 9, 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*, 3 (1), 42-48
- Tsuda, K., Hara, K and Uwasu, M (2013) Prospects and Challenges for Disseminating Life Cycle Thinking towards Consumers' Environmental Conscious Behaviors, *Sustainability*, 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*, 9 (2), 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*, 6, 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*, 44, 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*, 4, 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*, 61, 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*, 5(6), 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*, 3 (7), 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*, 6 (2), 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*, 9(1), 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*, 4 (2), 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*, 4 (1), 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*, 4 (1), 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*, 11(4), 239-256
- Yabar, H., Hara, K., and Zhang, H (2008) Impacts of Environmental Policy on technological innovations: Case Study in Japan, *Papers on Environmental Information Science*, 22, 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*, 7 (1), 109-115
- Hara, K., and Mino, T (2008) Evaluation of Sewage Sludge Recycling Options and Management System in Tokyo, *Waste Management*, 28 (12), 2645-2652
- Hara, K (2006) Groundwater Contamination and Quality Management Policy in Asia, *International Review for Environmental Strategies*, 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*, 30, 371-378 (in Japanese)

Preprint papers / Special report

- Hara K, Onuki M, Uwasu M, Tamura M, Kotera A, Pu J, Jarzebski M.P, Kameyama Y (2025) Sustainability Education Incorporating Intergenerational Issues: A Case Study of an Online-Based Program in Inter-University Curricula Adopting the Future Design Method, *SSRN* (preprint)
- Fuchigami Y, Ikenaga T, Kuroda M, Hara K(2025) Thinking from the Perspective of Imaginary Future Generations Changes the Public Perception of Sustainable Management of Water Supply Infrastructure – A Large-scale Questionnaire Survey in a Municipality of Japan, *SSRN* (preprint)
- Hara K, Iwasaki Y, Fuchigami Y (2024) Policy Choices and Individuals' Attitudes from the perspective of Imaginary Future Generations—A Discussion Experiment with City Officials on Carbon Neutrality, *SSRN* (preprint)
- Iwasaki Y, Kobashi T, Fuchigami Y, Hara K (2023) Future Scenarios and Assessment of Gradual Diffusion of Renewable Energy Technologies towards 2050: Case Study of a Japanese Municipality, *SSRN* (preprint)
- Gaper E, Hara K (2023) Lasting Effects of Future Design Practices and their Potential Application in the US Building Industry, *SSRN* (preprint)
- Hara K (2024) Future Design and Industrial Innovation, *RIETI Special Report*
- Hara K (2023) Application of Future Design to Policies: Insights from the practices adopting

["Imaginary Future Generations", RIETI Special Report](#)

Other Publications (In Japanese)

- Hara K (2025) Future Design Practices and Implications to Industrial Innovation, *Journal of Japan Society for Design Engineering*, 60 (10), 528-532
- Fujita Y, Yano K, Hara K (2025) Practicing Future Design with Diverse actors - Towards Carbon Neutrality by 2050, *Journal of Japan Society for Design Engineering*, 60 (10), 520-527
- Suzuki M, Hara K (2025) Future Design for Industrial and Technological Innovations - Prospective of rare metals supply for the development of a sustainable future society, *Journal of Japan Society for Design Engineering*, 60 (9), 456 – 462
- Eguchi M, Hara K (2025) A Practice of Future Design for Creating R&D Themes and TCFD Scenario Analysis, *Journal of Japan Society for Design Engineering*, 60 (9), 451- 455
- Hara, K (2023) Methodology of Future Design Practice and Research Prospects, *Journal of Japan Society for Design Engineering*, Vol.58(2), pp. 57-63
- Hara, K., Mikami, K (2019) Policy Challenges and Prospects for Manufacturing in Japan in the Era of Digitalization, *Journal of Japan Society for 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, *Journal of Japan Society for 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, *Journal of Japan Society for 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),

Book editor

- Fukushige S, Kobayashi H, Ymasue E, Hara K (eds), 2023, [EcoDesign for Sustainable Products, Services and Social Systems I](#), Springer
- 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

- 友枝敏雄・原圭史郎・南畠淳史・八木寛之(2025) フューチャー・デザインの可能性 - ワークショップの試みを通して、『フューチャー・デザインと社会学』西條辰義・野宮大志郎 編著、勁草書房, pp. 65-94
- 原圭史郎 (2021) 脱炭素社会に向けたフューチャー・デザイン、「都市の脱炭素化」小端拓郎編著、大河出版社, pp178-187
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