#### Curriculum Vitae

# Yosuke Shigetomi

Associate Professor, Graduate School of Fisheries and Environmental Sciences, Nagasaki University, Japan

1-14 Bunkyo-machi, Nagasaki, Japan 852-8521

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Nationality: Japan

### **Primary Employment**

Nov. 2018-Present Associate Professor, Graduate School of Fisheries and Environmental Sciences,

Nagasaki University

### **Previous Employments**

Apr. 2016-Oct. 2018 Assistant Professor, Graduate School of Fisheries and Environmental Science	ices,
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Nagasaki University

Apr. 2013-Mar. 2014 Research Assistant, National Institute for Environmental Studies, Japan

### **Education**

Apr. 2013-Mar. 2016	<b>Doctor of Philosophy in Energy Science</b>
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Graduate School of Energy Science, Kyoto University, Japan

Dissertation: "Study of Mid-Term Impact of Japanese Households on Formation

of Low-Carbon Society from Consumption-Based Approach"

Supervisors: Dr. Keisuke Nansai, Prof. Susumu Tohno

Apr. 2011-Mar. 2013 Master's Degree in Energy Science

Graduate School of Energy Science, Kyoto University, Japan

Apr. 2007-Mar. 2011 Bachelor's Degree in Engineering

Department of Applied Chemistry, Osaka Prefecture University, Japan

#### **Research Interests**

Industrial Ecology, Environmental Economics, Environmental Footprint, Input-Output Analysis, Lifestyle, Climate Change, Circular Economy, Work-Life Balance

### **Publications**

(Peer-Reviewed Journal Articles)

- 1. Shigetomi, Y., Kanemoto, K., Yamamoto Y., Kondo, Y. Quantifying the carbon footprint reduction potential of lifestyle choices in Japan, *Environmental Research Letters*, Accepted.
- 2. Ohno, H., Shigetomi, Y., Chapman, A., Fukushima, Y. (2021) Detailing the economy-wide carbon emission reduction potential of post-consumer recycling, *Resources, Conservation & Recycling*, 166, 105263.
- 3. Shigetomi, Y., Ishimura, Y., Yamamoto, Y. (2020) Trends in global dependency on the Indonesian palm oil and resultant environmental impacts. *Scientific Reports*, 10, 20624.
  - ♦ The related article was published in Kankyo Tenbou.
- 4. Kanemoto, K., Shigetomi, Y., Nguyen, H., Okuoka, K., Moran, D. (2020) Spatial variation in household consumption-based carbon emission inventories for 1,200 Japanese cities, *Environmental Research Letters*, 15(11), 114053.
  - ♦ Project website: <a href="https://city.spatialfootprint.com/">https://city.spatialfootprint.com/</a>
- 5. Chaube, A., Chapman, A., Shigetomi, Y., Huff, K., Stubbins, J. (2020) The role of hydrogen in achieving long term Japanese energy system goals. *Energies*, 13(17), 4539.
- 6. Taghizadeh-Hesary, F., Mortha, A., Farabi-Asl, H., Sarker, T., Chapman, A., Shigetomi, Y., Fraser, T. (2020) Role of energy finance in geothermal power development in Japan, *International Review of Economics and Finance*, 70, 398-412.
- 7. Shigetomi, Y., Chapman, A., Nansai, K., Matsumoto, K., Tohno, S. (2020) Quantifying lifestyle based social equity implications for national sustainable development policy, *Environmental Research Letters*, 15(8), 084044.
- 8. Shiraki, Y., Matsumoto, K., Shigetomi, Y., Tomoki, E., Ochi, Y., Ogawa, Y. (2020) Factors affecting CO<sub>2</sub> emissions from private automobiles in Japan: The impact of vehicle occupancy, *Applied Energy*, 259, 114196.
  - ♦ Press Release: Nagasaki University, E-konzal, University Press Center
- 9. Kanemoto, K., Moran, D., Shigetomi, Y., Reynold, C., Kondo, Y. (2019) Meat consumption does not explain differences in household food carbon footprints in Japan, *One Earth*, 1, 464-471.
  - ♦ The related articles were published in DailyMail, MarketWatch, Anthropocene, EL PAÍS, International Business Times, Courthouse News, iNews, Quartz, The University Network, mindbodygreen, Sustainability Times, RTL 102.5, La Vanguardia, EurekAlert, Phys.org, Kankyo Tenbou, and University Journal Online.
- 10. Shigetomi, Y., Ohno H., Chapman, A., Fujii, H., Nansai, K., Fukushima, Y. (2019) Clarifying demographic impacts on embodied and materially retained carbon towards climate change mitigation, *Environmental Science & Technology*, 53, 14123-14133.
  - Press Release: Nagasaki University, Tohoku University (Graduate School of Engineering), Kyushu University, National Institute for Environmental Studies

- ♦ Chosen as Supplementary Journal Cover in *Environmental Science & Technology*, vol. 53.
- 11. Huang, Y., Shigetomi, Y., Chapman, A., Matsumoto, K. (2019) Uncovering household carbon footprint drivers in an aging, shrinking society, *Energies*, 12(19), 3745.
- 12. Nansai, K., Kondo, Y., Giurco, D., Sussman, D.D., Nakajima, K., Kagawa, S., Takayanagi, W., Shigetomi, Y., Tohno, S. (2019) Nexus between economy-wide metal inputs and the deterioration of sustainable development goals, *Resources, Conservation & Recycling*, 149, 12-19.
- 13. Matsumoto, K., Shigetomi, Y., Shiraki, H., Ogawa, Y., Ochi, Y., Ehara, T. (2019) Addressing key drivers of regional CO<sub>2</sub> emissions of the manufacturing industry in Japan, *The Energy Journal*, 40, 01.
- 14. Yamamoto, Y., Shigetomi, Y., Ishimura, Y., Hattori, M. (2019) Forest change and agricultural productivity: Evidence from Indonesia, *World Development*, 114C, 196-207.
- 15. Chapman, A., Shigetomi, Y. (2018) Developing national frameworks for inclusive sustainable development incorporating lifestyle factor importance, *Journal of Cleaner Production*, 200, 39-47.
- 16. Shigetomi, Y., Matsumoto, K., Ogawa, Y., Shiraki, H., Yamamoto, Y., Ochi, Y., Ehara, T. (2018) Driving forces underlying sub-national carbon dioxide emissions within the household sector and implications for the Paris Agreement targets in Japan, *Applied Energy*, 228, 2321-2332.
  - ♦ Press Release: Nagasaki University, E-konzal, University Press Center
  - ♦ The related articles were published in Nagasaki Shinbun (Newspaper), Japan Business Press, and Kankyo Tenbodai.
- 17. Chapman, A., Shigetomi, Y. (2018) Visualizing the shape of society: An analysis of public bads and burden allocation due to household consumption, *Science of the Total Environment*, 639. 385-396.
- 18. Shigetomi, Y., Nansai, K., Kagawa, S., Tohno, S. (2018) Fertility-rate recovery and double-income policies require solving the carbon gap under the Paris Agreement, *Resources, Conservation & Recycling*, 133, 385-394.
- 19. Shigetomi, Y., Nansai, K., Kagawa, S., Kondo, Y., Tohno, S. (2017) Economic and social determinants of global physical flows of critical metals, *Resources Policy*, 52, 107-113.
- 20. Nansai, K., Nakajima, K., Suh, S., Kagawa, S., Kondo, Y., Takayanagi, W., Shigetomi, Y. (2017) The role of primary processing in the supply risks of critical metals, *Economic Systems Research*, 29(3), 335-356.
- 21. Shigetomi, Y., Nansai, K., Kagawa, S., Tohno, S. (2016) Influence of income differences on carbon and material footprints for critical metals: the case of Japanese households, *Journal of Economic Structures*, 5 (1), 1-19.
- 22. Shigetomi, Y., Nansai, K., Kagawa, S., Tohno, S. (2015) Trends in Japanese households' critical-metals material footprints, *Ecological Economics*, 119, 118-126.
- 23. Nansai, K., Nakajima, K., Kagawa, S., Kondo, Y., Shigetomi, Y., Suh, S. (2015) Global mining risk footprint of critical metals necessary for low-carbon technology: the case of neodymium, cobalt, and platinum, *Environmental Science & Technology*, 49, 2022-2031.
- 24. Shigetomi, Y., Nansai, K., Kagawa, S., Tohno, S. (2014) Changes in the carbon footprint of Japanese households in an aging society, *Environmental Science & Technology*, 48, 6069-6080.
- 25. Nansai, K., Nakajima, K., Kagawa, S., Kondo, Y., Suh, S., Shigetomi, Y., Oshita, Y. (2014) Global flows

- of critical metals necessary for low-carbon technologies: the case of neodymium, cobalt, and platinum, *Environmental Science & Technology*, 48, 1391-1400.
- 26. Shigetomi, Y., Yuba, A., Sadanaga, Y., Takami, A., Hatakeyama, S., Kato, S., Kajii, Y., Takenaka, N., Bandow, H. (2012) Yearly variations of the transboundary air pollutants by the long-term continuous measurements at Cape Hedo, Okinawa, *Journal of Japan Society for Atmospheric Environment*, 47, 46-50. (in Japanese)

## (Book chapter)

- 1. Chapman, A.J., Shigetomi, Y. (2021) Social Equity and Lifestyle Conscious Policy Making for the Energy Transition, Sustainable Production, Life Cycle Engineering and Management, EcoDesign and Sustainability II: Social Perspectives and Sustainability Assessment, (Eds.) Kishita, Y., Matsumoto, M., Inoue, M., Fukushige, S., Springer Nature.
- 2. Chapman, A., Shigetomi, Y., Fujii, H., Managi, S. (2019) Chapter 5: Evaluation indicators and policy making for promoting the SDGs, *Practice of the UN SDGs for local and regional activations: Toward the achievement of sustainable local society* (Eds:) Murakami, S., Endo, K., Fujino, J., Sato M., Managi, S., in Press, Senden Kaigi. (in Japanese)
- 3. Shigetomi, Y., Yamamoto, Y. (2018) Invisible links between palm oil and our lifestyle, *Monthly Agri-Bio* (*September*), 2 (10), 44-46, Hokuryukan. (in Japanese)
- 4. Shigetomi, Y., Nansai, K., Shironitta, K., Shigemi, K. (2017) Chapter 16: Revisiting Japanese carbon footprint studies, *Environmental and Economic Impacts of Decarbonization: Input–Output Studies on the Consequences of the 2015 Paris Agreements*, (Eds:) Dejuán, Ó., Lenzen M., Cadarso, M-Á, 335-350, Routledge.

### (Other Publications)

- Murakami, S., Natakani, J., Nakajima, K., Amasawa, E., Ii, R., Hayashi, K., Yoshikawa, N., Daigo, I., Kishita, Y., Ihara, T., Shobatake, K., Kudoh, Y., Motoshita, M., Kanemoto, K., Hara, M., Kashiwagi, A., Hashimoto, S., Shigetomim Y., Kanzaki, M., Kikuchi, Y., Ohno, H., Fukushima, Y. (2019) EcoBalance 2018—Nexus of ideas: Innovation by linking through life cycle thinking (9–12 October 2018, Tokyo, Japan), *International Journal of Life Cycle Assessment*, 24 (8), 1544-1552.
- Kondo, Y., Fukushima, Y., Murakami, S., Okajima, K., Sugiyama, H., Hayashi, K., Matsubae, K., Matsuno, Y., Kakisawa, H., Motoshita, M., Nakajima, M., Nakajima, K., Itsubo, N., Shigetomi, Y. (2015) Report on the International Conference EcoBalance 2014, *Journal of Life Cycle Assessment, Japan*, 11, 198-206. (in Japanese)
- 3. Shigetomi, Y., Tadaka, H., Hienuki, S., Eguchi, S., Ito A., Okamoto, S. (2015) What should students learn through LCA studies?: A report of the Discussion Meeting at the 6th ILCAJ-SCN Summer Workshop, *Journal of Life Cycle Assessment, Japan*, 11, 55-58. (in Japanese)
- 4. Okamoto, S., Shigetomi, Y., Hienuki, S., Tadaka, H., Ito A. (2014) History of Student Communication Network from the ILCAJ, *Journal of Life Cycle Assessment, Japan*, 10, 430-431. (in Japanese)

### **Conference Presentations**

- 1. Shigetomi, Y., Kanemoto, K., Yamamoto, Y., Kondo, Y.: Estimating the household carbon footprint using micro-consumption data in Japan, *The 15th Meeting of The Institute of Life Cycle Assessment*, Online Conference, March 2021. (in Japanese)
- 2. Ohno H., Shigetomi, Y., Chapman, A., Fukushima, Y. Determining the performance requirement for recycling technologies for carbon-containing products based on the iceberg approach, *The 14th EcoBalance International Conference*, Online Conference, March 2021.
- 3. Shigetomi, Y., Ishimura, Y., Yamamoto, Y., Hattori, M. Examining the Quantification of Supply Chain Environmental Burden Induced by Global Palm Oil Demands, *The 15th Meeting of The Institute of Life Cycle Assessment*, Online Conference, March 2020. (in Japanese)
- 4. Shigetomi, Y., Ishimura, Y., Hattori, M., Yamamoto, Y. Timeseries analysis of environmental impacts of palm oil consumption through the international supply chain, *The 36th National Energy Systems, Economics & Environment Conference*, Tokyo, Japan, January 2020. (in Japanese)
- 5. McLellan, B.C., Chapman, A., Yamasue, E., Shigetomi, Y., Farzaneh, H., Giurco, D. Consequences of consequential transitions, *EcoDesign 2019*, Yokohama, Japan, November 2019.
- 6. Chapman, A., Shigetomi, Y. Social Equity and Lifestyle Conscious Policy Making for the Energy Transition, *EcoDesign 2019*, Yokohama, Japan, November 2019.
- 7. Shigetomi, Y., Andrew, C. Analyzing social equity associated with the distribution of incomes using an input-output approach, *Pan Pacific Association of Input-Output Studies: The 30th Conference*, Fukuoka, Japan, November 2019. (in Japanese)
- 8. Shigetomi, Y., Andrew, C., Nansai, K., Tohno, S. Visualizing Subjectively Weighted Lifestyle-Based Social Equity, *The 27th International Input-Output Conference*, Glasgow, United Kingdom, June-July 2019.
- 9. Ohno H., Shigetomi Y., Fukushima Y. Comprehensive quantification of potential benefits from plastic recycling, *The 10th International Symposium on Feedstock Recycling of Polymeric Materials*, Budapest, Hungary, May 2019.
- 10. Shigetomi, Y., Andrew, C., Nansai, K., Tohno, S. Visualizing Subjectively Weighted Lifestyle-Based Social Equity, *The 14th Meeting of The Institute of Life Cycle Assessment*, Fukuoka, Japan, March 2019. (in Japanese)
- 11. Aono, Y., Shigetomi, Y. Analyzing lifestyle-based environmental footprints with a focus on time use shifts, The 14th Meeting of The Institute of Life Cycle Assessment, Fukuoka, Japan, March 2019. (in Japanese)
- 12. Zhu, K., Shigetomi, Y., Fujii, H. Analysis of the circular economy indices for electrical appliance manufacturing, *The 14th Meeting of The Institute of Life Cycle Assessment*, Fukuoka, Japan, March 2019. (in Japanese)
- 13. Shigetomi, Y., Ohno, H., Fukushima, Y.: The role of households in avoiding carbon release in end-of-life products: the case of Japan, *The 13th EcoBalance International Conference*, Tsukuba, Japan, October

2018.

- 14. Chapman, A., Shigetomi, Y.: A Generational Household Level Analysis of Public Bads and Environmental Injustice in an Aging, Shrinking Population, *The 13th EcoBalance International Conference*, Tokyo, Japan, October 2018.
- 15. Ohno, H., Shigetomi, Y., Fukushima, Y.: Evaluation of carbon intensity of goods consumed by households by integrating footprint and flow of carbon: the case of Japan, *The 13th EcoBalance International Conference*, Tokyo, Japan, October 2018.
- 16. Matsumoto, K., Shigetomi, Y., Shiraki, H., Ochi, Y., Ogawa, Y., Ehara, T.: Regional-scale decomposition analysis of CO<sub>2</sub> emissions of the manufacturing industry in Japan, *The 41st IAEE International Conference*, Groningen, Netherlands, June 2018.
- 17. Shigetomi, Y., Matsumoto, K., Ehara, T., Ochi, Y., Ogawa, Y., Shiraki, Y., Yamamoto, Y.: Identifying Drivers of Residential Energy-Related CO<sub>2</sub> Emissions in 47 Prefectures, *The 13th Meeting of The Institute of Life Cycle Assessment*, Tokyo, Japan, March 2018. (in Japanese)
- 18. Chapman, A.J., Shigetomi, Y.: Generational Social Burden Issues due to Household Consumption, *The 13th Meeting of The Institute of Life Cycle Assessment*, Tokyo, Japan, March 2018. (in Japanese)
- 19. Shigetomi, Y., Chapman, A.J.: Evaluation of social equity associated with household consumption from the life cycle perspective, *The 34th National Energy Systems, Economics & Environment Conference*, Tokyo, Japan, January 2018. (in Japanese)
- 20. Shigetomi, Y., Nansai, K., Tohno, S.: How is carbon footprint of households affected by the Japan's new policy to raise birthrate and income? *The 8th International Conference on Industrial Ecology*, Chicago, USA, June 2017.
- 21. Shigetomi, Y., Nansai, K., Kagawa, S., Tohno, S.: Carbon footprint mitigation of Japanese households for achieving the Paris Agreement under the demographic and income scenarios, *The 25th International Input-Output Conference*, Atlanta, USA, June 2017.
- 22. Shigetomi, Y., Nansai, K., Kagawa, S., Tohno, S.: Agenda for achievement of the Paris Agreement on "A Society in Which All Citizens are Dynamically Engaged", *The 12th Meeting of The Institute of Life Cycle Assessment*, Kashiwa, Japan, March 2017. (in Japanese)
- 23. Shigetomi, Y., Nansai, K., Tohno, S.: The trade-offs between carbon and critical metal footprints of Japanese households, *The 24th International Input-Output Conference*, Seoul, South Korea, July 2016.
- 24. Shigetomi, Y., Nansai, K., Kagawa, S., Kondo, Y., Tohno, S.: Future scenario analysis of global flow structures with a focus on critical metals, *The 11th Meeting of The Institute of Life Cycle Assessment*, Kashiwa, Japan, March 2016. (in Japanese)
- 25. Shigetomi, Y., Nansai, K., Kagawa, S., Tohno, S.: Estimation of Global Flows of Critical Metals Using a Gravity Model, *Pan Pacific Association of Input-Output Studies: The 26th Conference*, Tokyo, Japan, October-November 2015.
- 26. Shigetomi, Y.: Household's carbon and material footprints in Japan econometric approach for their future estimations. *International Workshop on Industrial Ecology*, Ohita, July 2015.
- 27. Shigetomi, Y., Nansai, K., Tohno, S.: Comparison between global carbon and material footprints of

- Japanese households, *The 10th Meeting of The Institute of Life Cycle Assessment*, Kobe, Japan, March 2015. (in Japanese)
- 28. Shigetomi, Y., Nansai, K., Tohno, S.: Supply security footprint of critical metals related to household consumption, *The 11th International Society for Industrial Ecology Socio-Economic Metabolism section conference and the 4th ISIE Asia-Pacific conference*, Melbourne, Australia, November 2014.
- 29. Shigetomi, Y., Nansai, K., Tohno, S.: The impact of demographic change in Japan on supply security footprint of critical metals, *The 11th International Conference on EcoBalance*, Tsukuba, Japan, October 2014.
- 30. Shigetomi, Y., Nansai, K., Tohno, S.: Change in supply security footprints of critical metals induced by Japanese household consumption from 2005 to 2035, *The 22nd International Input-Output Conference*, Lisbon, Portugal, July 2014.
- 31. Shigetomi, Y., Nansai, K., Tohno, S.: The relationship between Japanese household consumption and international flow of rare metals, *The 9th Meeting of The Institute of Life Cycle Assessment*, Tokyo, Japan, March 2014. (in Japanese)
- 32. Shigetomi, Y., Nansai, K., Tohno, S.: Forecast of Consumption-based GHG Emissions in Japan from the View Point of Household Consumption, *Pan Pacific International Input-Output Studies: The 24th Conference*, Nagoya, Japan, October 2013. (in Japanese)
- 33. Shigetomi, Y., Nansai, K., Tohno, S.: Future projection of global greenhouse gas emissions associated with Japanese household consumption with a global link input-output model, *The 21st International Input-Output Conference*, Kitakyushu, Japan, July 2013.
- 34. Shigetomi, Y., Nansai, K., Tohno, S.: Estimate of Japanese global GHG emissions considering the future transition of household composition, *The 8th Meeting of The Institute of Life Cycle Assessment*, Shiga, Japan, March 2013. (in Japanese)
- 35. Shigetomi, Y., Yuba, A., Sadanaga, Y., Takami, A., Hatakeyama, S., Uno, I., Kato, S., Kajii, Y., Takenaka, N., Bandow, H.: Yearly variations of the trans-boundary air pollutants by the long-term continuous measurements at Cape Hedo, Okinawa, *Japan Society for Atmospheric Environment, The 52th Annual Conference*, Nagasaki, Japan, September 2011. (in Japanese)
- 36. Shigetomi, Y., Yuba, A., Sadanaga, Y., Takami, A., Hatakeyama, S., Uno, I., Kato, S., Kajii, Y., Takenaka, N., Bandow, H.: Analysis of the trans-boundary air pollution derived from East Asia by the long-term continuous measurements of NO<sub>y</sub> and HNO<sub>3</sub> at Cape Hedo, Okinawa, *The Chemical Society of Japan, The 91th Annual Conference*, Kanagawa, Japan, March 2011. (in Japanese)

## **Poster Presentations**

- 1. Shigetomi, Y., Andrew, C., Nansai, K., Tohno, S. Visualizing Subjectively Weighted Lifestyle-Based Social Equity, *The 14th Meeting of The Institute of Life Cycle Assessment*, Fukuoka, Japan, March 2019. (in Japanese)
- 2. Shu, K., Shigetomi, Y., Fujii, H. Analysis of the Circular Economy Indices for Electrical Appliance Manufacturing, *The 14th Meeting of The Institute of Life Cycle Assessment*, Fukuoka, Japan, March 2019.

(in Japanese)

- 3. Shigetomi, Y., Matsumoto, K., Yamamoto, Y., Ehara, T., Ochi, Y., Ogawa, Y., Shiraki, H. Influence of regional socio-economic drivers on residential CO<sub>2</sub> emissions in Japan, *The 41st IAEE International Conference*, Groningen, June 2018.
- 4. Yamamoto, Y, Ishimura, Y., Shigetomi, Y., Hattori, M.: Forest change and agricultural productivity: Evidence from Indonesia, *The 6th World Congress of Environmental and Resource Economists*, Gothenburg, Sweden, June 2018.
- 5. Matsumoto, K., Shigetomi, Y., Ehara, T., Ochi, Y., Ogawa, Y., Shiraki, H., Yamamoto, Y. Addressing the key drivers of regional energy consumption of the manufacturing industry in Japan, *The 8th International Conference on Life Cycle Management*, Luxemburg, September 2017.
- 6. Shigetomi, Y.: Promotion of household social policies with adoption of the Paris Agreement in Japan, *The 12th EcoBalance International Conference*, Kyoto, Japan, October 2016.
- 7. Shigetomi, Y., Nansai, K., Kagawa, S., Kondo, Y., Tohno, S.: Future scenario analysis of global flow structures with a focus on critical metals, *The 11th Meeting of The Institute of Life Cycle Assessment*, Kashiwa, Japan, March 2016. (in Japanese)
- 8. Eguchi, S., Shigetomi, Y., Tadaka, H., Tamura K., Yokoi, S., Ito, R.: ILCAJ-Student Communication Network Activity Report 2015, *The 11th Meeting of The Institute of Life Cycle Assessment*, Kobe, Japan, March 2015. (in Japanese)
- 9. Shigetomi, Y., Nansai, K., Tohno, S.: Finding common features of material footprints for critical metals and carbon footprint with Japanese household consumption, *The 7th International Conference on Life Cycle Management*, Bordeaux, France, August-September 2015.
- 10. Shigetomi, Y., Nansai, K., Tohno, S.: Comparison between global carbon and material footprints of Japanese households, *The 10th Meeting of The Institute of Life Cycle Assessment*, Kobe, Japan, March 2015. (in Japanese)
- 11. Shigetomi, Y., Tadaka, H., Ito A., Hienuki, S., Eguchi, S., Okamoto, S.: ILCAJ-Student Communication Network Activity Report 2014, *The 10th Meeting of The Institute of Life Cycle Assessment*, Kobe, Japan, March 2015. (in Japanese)
- 12. Shigetomi, Y., Nansai, K., Tohno, S.: The relationship between Japanese household consumption and international flow of rare metals, *The 9th Meeting of The Institute of Life Cycle Assessment*, Tokyo, Japan, March 2014. (in Japanese)
- 13. Shigetomi, Y., Nansai, K., Tohno, S.: Environmental footprints of households from the viewpoint of an aging society with fewer children, *SETAC Europe 19th LCA case study symposium*, Rome, Italy. November 2013.
- 14. Shigetomi, Y., Nansai, K., Tohno, S.: Change in consumption-based greenhouse gas emissions and energy consumptions from households associated with the future transition of household composition in Japan, *The 6th International Conference on Industrial Ecology*, Ulsan, South Korea, June 2013.
- 15. Shigetomi, Y., Nansai, K., Tohno, S.: Estimate of Japanese global GHG emissions considering the future transition of household composition, *The 8th Meeting of The Institute of Life Cycle Assessment*, Shiga,

Japan, March 2013. (in Japanese)

### Awards

- 1. Institute of Physics: Outstanding Reviewer Award for Environmental Research Letters 2020
- 2. The Institute of Life Cycle Assessment Japan: Young Researcher's Award 2021 "For contributions in Research on Development of an Input-Output LCA Method Incorporating Consumer Diversity"
- 3. Institute of Physics: IOP Trusted Reviewer 2020
- 4. Best Student Poster Presentation Award, 10th Conference of the Institute of Life Cycle Assessment, Japan, March 2015.
- 5. Best Student Poster Presentation Award, 9th Conference of the Institute of Life Cycle Assessment, Japan, March 2014.

### **Skills**

Languages: Japanese (native), English (professional proficiency)

Software: MATLAB; STATA; Microsoft Office including Word, Excel, and PowerPoint

## **Professional organizations**

International Input-Output Association, International Society for Industrial Ecology, International Association of Energy Economics, Institute of Life Cycle Assessment Japan, Pan Pacific Association of Input-Output Studies, Institute of Japan Energy and Resources

### Grant

- 1. Grant-in-Aid for Japan Society for Scientific Research (B) (21H03673), Principal Investigator, JPY13,100,000, 2021-2024.
- 2. Sumitomo Foundation, Grant for an Environmental Research Project, Special Research, Co-Investigator (PI: Dr. Tomoki Nakayama), JPY9,000,000, 2020-2022.
- 3. Kyushu University QR Program TSUBASA, Co-Investigator (PI: Dr. Andrew Chapman), JPY2,650,000, 2019-2021.
- 4. Grant-in-Aid for Japan Society for Scientific Research (B) (19H04340), Co-Investigator (PI: Dr. Yuki Yamamoto), JPY 13,200,000, 2019-2022.
- 5. Research Institute for Humanity and Nature (RIHN) Research Programs, Co-Investigator (PI: Dr. Keiichiro Kanemoto), JPY266,000,000, 2018-2024.
- 6. Grant-in-Aid for Japan Society for Young Scientists (18K18231), Principal Investigator, JPY 3,300,000, 2018-2021.
- 7. Asahi Glass Foundation, Humanity Research, Principal Investigator, JPY1,000,000, 2018-2020.
- 8. Nagasaki University Global Cooperative Support Fund, Principal Investigator, JPY800,000, 2018-2019.
- 9. Kyushu University QR Program New WAKABA Challenge, Co-Investigator (PI: Dr. Andrew Chapman), JPY1,050,000, 2017-2018.

- 10. Grant-in-Aid for Japan Society for Research Activity Start-up (16H07072), Principal Investigator, JPY 2,300,000, 2016-2018.
- 11. Grant-in-Aid for Japan Society for the Promotion Science Fellows (No. 26 4971), Principal Investigator, JPY 2,200,000, 2014-2016.

# **Professional Experience**

May. 2021-Mar. 2023	Committee of the ILCAJ International Committee
Jul. 2020-May. 2021	Committee of the 16th ILCAJ Conference
Jul. 2019-May. 2020	Committee of the 15th ILCAJ Conference
Jul. 2018-May. 2019	Committee of the 14th ILCAJ Conference
Apr. 2015-Mar. 2016	Head of the Student Communication Network at the Institute of Life Cycle
	Assessment, Japan (ILCAJ-SCN)
Apr. 2014-Mar. 2015	Vice Head of the Student Communication Network at the Institute of Life Cycle
	Assessment, Japan (ILCAJ-SCN)

## **Teaching**

- ➤ International Environment Studies II, Faculty of Environmental Science, Nagasaki University, 2016-Present
- Sustainable Society I, Faculty of Environmental Science, Nagasaki University, 2019-Present
- ➤ Introduction to Environmental Science, Faculty of Environmental Science, Nagasaki University, 2016-Present
- Resource Management, Faculty of Environmental Science, Nagasaki University, 2016-Present
- > Special Lecture on Environmental Science, Faculty of Environmental Science, Nagasaki University, 2019-Present
- Seminar on Environmental Science, Faculty of Environmental Science, Nagasaki University, 2016-Present
- Seminar on Fundamental Environmental Science, Faculty of Environmental Science, Nagasaki University, 2016-Present
- ➤ Freshman Seminar on Environmental Science, Faculty of Environmental Science, Nagasaki University, 2018, 2021
- ➤ Fundamental Environmental Policy, Graduate School of Fisheries and Environmental Sciences, Nagasaki University, 2018-Present
- Avanced Environmental Policy, Graduate School of Fisheries and Environmental Sciences, Nagasaki University, 2018-Present
- ➤ Environmental Economics and Policy Studies, Graduate School of Fisheries and Environmental Sciences, Nagasaki University, 2016-Present
- > Special Lecture for PhD Candidates at Graduate School of Fisheries and Environmental Sciences, Graduate School of Fisheries and Environmental Sciences, Nagasaki University, 2020

## **Refereeing Activities**

- ➤ Applied Energy
- ➤ Ecological Economics
- > Ecological Indicator
- > Energies
- ➤ Energy Policy
- > Environmental Economics and Policy Studies
- > Environmental Research Communication
- Environmental Research Letters
- Frontiers in Energy
- ➤ International Journal of Energy Research
- International Journal of Environmental Research and Public Health
- Japan Journal of Environmental Information Science
- > Japan Journal of Environmental Science
- > Journal of Cleaner Production
- ➤ Journal of Economic Structures
- Journal of Environmental Management
- Journal of Industrial Ecology
- > Journal of Institute of Life Cycle Assessment, Japan
- > Journal of Material Cycles and Waste Management
- ➤ Nature Sustainability
- ➤ Nature Communications
- One Earth
- > Processes
- Resources
- Resources, Conservation and Recycling
- Resources Policy
- > Structural Change and Economic Dynamics
- > Sustainability
- > Sustainability Science
- > The Energy Journal

#### References

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