

## KAZUYOSHI NAKANO

Senior Research Scientist, Ph.D (Informatics),  
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### EDUCATION

- Ph.D. **Informatics**, Graduate School of Informatics, Kyoto University, Kyoto, Japan, 2011  
Supervisor: Hirokazu Tatano, DPRI, Kyoto Univ.  
Thesis : Economic Impact Assessment of a Natural Disaster to Industrial Sectors
- M.S. **Informatics**, Graduate School of Informatics, Kyoto University, Kyoto, Japan, 2008  
Supervisor: Hirokazu Tatano, DPRI, Kyoto Univ.  
Thesis : A Methodology for Measuring Economic Impacts from Reduction of  
Production Capacity caused by Natural Disasters (in Japanese)
- B.S. **Engineering**, Civil Engineering, Faculty of Engineering, Kyoto University, Kyoto,  
Japan, 2006

### ACADEMIC APPOINTMENTS

July.2022 to present

**Senior Research Scientist**, Socio-economic Research Center, CRIEPI.

April.2011 to June.2022

**Research Economist**, Socio-economic Research Center, CRIEPI.

April.2010 to March.2011

**Research Fellow** of the Japan Society for the Promotion of Science (JSPS)

Project: A Methodology for Consistent Measurement of Economic Loss due to Major Natural  
Disaster Taking into Account Long Term Effect

### PEER-REVIEWED PUBLICATIONS

1. Yamazaki, S., Kotani, H., Nakano, K., and Matsushima, K.  
Using electric vehicles to power houses or travel during blackouts triggered by natural  
hazards: a choice experiment in Japan, Energy and Buildings, Vol.342, 115801, 2025.
2. Kotani, H., and Nakano, K.  
Household resilience realized by photovoltaic and battery energy system in natural hazard-  
triggered blackouts: Evidence from Japan, International Journal of Disaster Risk Reduction,  
Vol.90, 2023

<https://doi.org/10.1016/j.ijdr.2023.103656>

3. Kotani, H., and Nakano, K.  
How a household survived a natural hazard-triggered blackout with photovoltaic and battery energy system: a report of 2018 Hokkaido Eastern Iburi earthquake in Japan, *Journal of Disaster Research*, Vol.18, No.3, pp.280-286, 2023.  
<https://doi.org/10.20965/jdr.2023.p0280>
4. Kotani, H., and Nakano, K.  
Purchase decision process and information acquisition of zero-energy houses in Japan, *Journal of Asian Architecture and Building Engineering*, Vol.22, No.2, pp.556-575, 2023.  
<https://doi.org/10.1080/13467581.2022.2047057>
5. Kajitani, Y., Cruz, A.M., Tatano, H. , Nakano, K., Choi, J., and Yasuda, N.  
Economic impacts caused by the failure of a maritime global critical infrastructure-a case study of chemical facility explosion in the Straits of Malacca and Singapore, *Journal of Transportation Security*, Vol.6, No.4, pp.289-313, 2013.
6. Nakano, K., Kajitani, Y, Tatano. H.  
Consistent Measurement of Economic Losses of a Natural Disaster Considering the Effect of Change in Price, *Proceedings of the 2011 IEEE International Conference on Systems, Man and Cybernetics*, pp. 3489- 3494, 2011.
7. Nakano, K. and Tatano.H.  
Economic Impacts of Disasters Taking into Account the Costs of Substitution of Intermediate Goods, *Proceedings of the 2009 IEEE International Conference on Systems, Man and Cybernetics*, pp.1142-1147, 2009.
8. Nakano, K. and Tatano.H.  
Economic Restoration Process after Natural Disasters under a Mutual Relationships between Industrial Sectors, *Proceedings of the IEEE International Conference on Systems, Man and Cybernetics*, pp.2895-2900, 2008.
9. K.Nakano, H.Tatano, T.Fujimi, K.Yoshio and S.Tsuchiya  
Estimation of the Economic Loss in Industrial Sectors Caused by the 2004 Mid-Niigata Earthquake, *Infrastructure Planning Review*, No.24, pp.289-298, 2007.(in Japanese)
10. K.Nakano and H.Tatano  
A Methodology for Consistent Measurement of Economic Losses Caused by Natural Hazards Taking Account of Mutual Relations between Industries, *Infrastructure Planning Review*, No.25, no.1, pp.255-266, 2008.(in Japanese)
11. K.Yoshio, K.Nakano, Shu Kakei, H.Tatano  
Economic Impacts on Industrial Sectors by the Niigata Chuetsu-oki Earthquake in 2007- Survey of Firms' Damages and Responses, *Journal of Social Safety Science*, pp.161-168, 2008. (in Japanese)

## **NON-PEER-REVIEWED PAPERS**

1. Takahashi, K., Frost, J., Goldberg, D., Hopkins, A., Nishio, K., and Nakano, K.  
Survey of U.S. state and local building decarbonization policies and programs, *ACEEE Summer Study on Energy Efficiency in Buildings*, 2020
2. Iwamatsu, T., Nishio, K., Komatsu, H., Mukai, T., Kim, H., Nakano, K., Sasaki, M, Ogawa, T, Otani, S., Ito, C., Odate, Y., and Maeki, W.  
Empirical experiments for smartphone app energy conservation services targeting residential

sectors: an overview of initial findings, BECC, 2019, Nov.17-20., Sacramento, CA, 2019.

3. Mukai, T., Nishio, K., Komatsu, H., Iwamatsu, T., Kim, H., Nakano, K., Sasaki, M, Ogawa, T, Otani, S., Ito, C., Odate, Y., and Maeki, W.  
Comparing matching methods in behavioral programs – an evaluation of smartphone energy management service app, 2019 IEPEC (International Energy Program Evaluation Conference), Denver, CO, 2019.8.

### **Invited Talk & Oral Presentations**

1. Panelist: Electrifying heating and cooling in buildings, IRENA Innovation Week 2023
2. Nakano, K.  
Regional Demographic Forecasts for Japan Using a Multiregional Model Incorporating Economic Conditions, the 63th North American Meetings on Regional Science Association International, Minneapolis, November 9-12, 2016.
3. Kajitani, Y., Nakano, K., and Yuyama, A.  
Enhancing Business Resilience under Power Shortage: Effective Allocation of Scarce Electricity Based on Power System Failure and CGE Models, 22nd International Input-Output Conference , Lisbon, July 13-18, 2014.
4. Nakano, K., Kajitani, Y., and Tatano, H.  
Modeling Recovery Process of Regional Economy after a Disaster for Consistent Measurement of Overall Economic Loss, 21st International Input-Output Conference, Kitakyushu, July 7-12, 2013.
5. Nakano, K.  
Demographic change after the 2011 Great East Japan earthquake: impacts of interregional migration, IDRiM conference 2013 in Northumbria University, September, 2013.

### **Other Reports**

1. Nishio, K., and Nakano, K.  
Study on initiatives for building decarbonization-Case studies of US states and local governments and implications for Japan-, Y19005, CRIEPI, 2020.
2. Nakano, K.  
Impacts of population aging with changes in household-sizes on residential electricity demand - A forecast of the regional households by household-types and dwelling-types in Japan -, Y14009, CRIEPI, 2015.
3. Otsuka, A., and Nakano, K.  
Structural Analysis and Simulation of Residential Electric Demand in Japan, Y13006, CRIEPI, 2014.
4. Nakano, K. , Otsuka, A., and Taguchi, H.  
Development of a demographic forecasting model for 47 prefectures in Japan - Simulation analysis of population structure until 2050 -, Y12024, CRIEPI, 2013.
5. Nakano, K. , Kajitani, Y., Tagashira, N., Hitomi, K., and Tatano, H.  
Survey for economic impact and business recovery of the Great East Japan Earthquake, Y11022, CRIEPI, 2012.