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Personal Details

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Education

- Graduate school of Engineering, Osaka University PhD 2003.04~2006.03
- Osaka University, graduate school of Engineering MA 2001.04~2003.03
- Osaka University, school of Engineering BA 1999.04~2001.03

Short bio

Yohei Yamaguchi is an Associate Professor at the Graduate School of Engineering, Osaka University, where he has been in his current position since April 2015. His research interests include the development of modeling methods for energy demand of building stock and the application of the developed models to climate change mitigation analysis. His main research interests are 1) stochastic modeling of people's daily activities, 2) analysis of people's activities and practices, 3) modeling and management of community/building stock energy demand, and 4) climate change mitigation analysis.

Selected publications

1. Perwez U, Shono K, Yamaguchi Y, Shimoda Y. Multi-scale UBEM-BIPV coupled approach for the assessment of carbon neutrality of commercial building stock. *Energy and Buildings* 2023;291:113086. <https://doi.org/10.1016/J.ENBUILD.2023.113086>.
2. Shono K, Yamaguchi Y, Perwez U, Ma T, Dai Y, Shimoda Y. Large-scale building-integrated photovoltaics installation on building façades: Hourly resolution analysis using commercial building stock in Tokyo, Japan. *Solar Energy* 2023;253:137–53. <https://doi.org/10.1016/J.SOLENER.2023.02.025>.
3. Yamaguchi Y, Shoda Y, Yoshizawa S, Imai T, Perwez U, Shimoda Y, Hayashi Y. Feasibility assessment of net zero-energy transformation of building stock using integrated synthetic population, building stock, and power distribution network framework. *Applied Energy* 2023;333:120568. <https://doi.org/10.1016/J.APENERGY.2022.120568>.
4. Li Y, Yamaguchi Y, Torriti J, Shimoda Y. Modeling of occupant behavior considering spatial variation: Geostatistical analysis and application based on American time use survey data. *Energy and Buildings* 2023;281:112754. <https://doi.org/10.1016/J.ENBUILD.2022.112754>.
5. Yamaguchi Y, Kim B, Kitamura T, Akizawa K, Chen H, Shimoda Y. Building stock energy modeling considering building system composition and long-term change for climate change mitigation of commercial building stocks. *Applied Energy* 2022;306:117907. <https://doi.org/10.1016/J.APENERGY.2021.117907>.
6. Yoshiyuki Shimoda, Yohei Yamaguchi, Yumiko Iwafune, Kazuyoshi Hidaka, Alan Meier, Yoshie Yagita, Hisaki Kawamoto, Soichi Nishikiori: Energy demand science for a decarbonized society in the context of the residential sector, *Renewable and Sustainable Energy Reviews* 132, 110051, October 2020, <https://doi.org/10.1016/j.rser.2020.110051>.
7. Yamaguchi, Y. (2018). A practice-theory-based analysis of historical changes in household practices and energy demand: A case study from Japan. *Technological Forecasting and Social Change*. <https://doi.org/10.1016/J.TECHFORE.2018.01.032>.