Spatiotemporal building stock modeling for residential decarbonization in the Netherlands

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Acknowledgments

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一切过往，皆为序章。

List of publications

(1) Yang, X., Hu, M., Zhang, C., Steubing, B. A combined GIS-archetype approach to model residential space heating energy: A case study for the Netherlands including validation. Applied Energy 280, 115953 (2020).

(2) Yang, X., Hu, M., Tukker, A., Zhang, C., Huo, T., Steubing, B. A bottom-up dynamic building stock model for residential energy transition: A case study for the Netherlands. Applied Energy 306, 118060 (2022).

(3) Yang, X., Hu, M., Zhang, C., Steubing, B. Urban mining potential to reduce primary material use and carbon emissions in the Dutch residential building sector. Resources, Conservation & Recycling. 180, 106215 (2022).

(4) Yang, X., Hu, M., Zhang, C., Steubing, B. Key strategies for decarbonizing the residential building stock: Results from a spatiotemporal model for Leiden, the Netherlands. Resources, Conservation & Recycling. 184, 106388 (2022).

Curriculum Vitae

Xining Yang (杨希宁) was born on 26 September 1991, in Baoding City, Hebei Province, China. He graduated from Laiyuan County No. 1 Middle School in 2011. From 2011 to 2015, he studied at Shijiazhuang Tiedao University and obtained a BSc degree in Engineering Management. He majored in Technical Economy and Management at Chongqing University from 2015 to 2018. During this period, he was supervised by Bin Zhao and Mingming Hu and mainly engaged in combining Life Cycle Assessment with Building Information Modeling to assess the life cycle environmental impacts of buildings at the design stage.

Funded by the China Scholarship Council (CSC), he joined the Institute of Environmental Science (CML) at Leiden University as a PhD candidate in September 2018. Under the supervision of Dr Bernhard Steubing, Dr Mingming Hu, and Prof. Arnold Tukker, he focused on developing data-intensive building stock models that can simulate the building stock development as well as the associated material flows, energy demand and generation, and carbon emissions to support the formulation of policies relevant to the circular economy, energy transition and climate change mitigation.