## **CHINA CROSSROADS**

Thursday, April 20<sup>th</sup>, 2023, 19:30 - 21:00

Climate Tradeoffs in Urbanization in China and Beyond: Should Cities Sprawl or Densify?

**Huang Kangning** 

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WhiteSpace | Jianing Building 5F | 500 Yanan Xi Lu 150rmb admission with drink | FREE for members RSVP to Frank Tsai at <a href="editor@shanghai-review.org">editor@shanghai-review.org</a>



If the trend of urban sprawl in the past decades continues, low-density urban areas will increase car ownership and commute distances, making it more difficult to mitigate emissions in cities. On the other hand, if urban growth is accommodated by densifying existing cities, high-density urban areas will intensify the urban heat island effect and worsen urban flooding, making it more difficult for cities to respond to more frequent and severe climate disasters. The speaker will aim to quantify the climate trade-offs between urban sprawl and densification by developing different global scenarios of urban growth with an urban land change model he developed.

Huang Kangning is Assistant Professor of Environmental Studies at NYU Shanghai. He received his PhD degree from Yale University, School of the Environment in 2020. Prior to joining NYU, he was an Advanced Study Program Postdoctoral Fellow at the National Center for Atmospheric Research. His research and teaching focus on the overarching question of: How does urbanization affect climate change? The urbanization-induced land cover changes affect the regional climate by altering the surface hydrometeorological processes, and the urbanization-induced life-style changes affect the global climate by increasing fossil energy consumption. However, the cross-scale impacts of urbanization on climate change are not constant; instead, these impacts depend on where and how we will build cities of the future. By developing global-scale urbanization scenarios, his research explores a broad range of possible urban climate futures and the interventions needed to achieve the more sustainable ones. His research has been funded by NASA, NSF, and other sponsors.

<u>China Crossroads</u> hosts talks on all topics related to China, including business, foreign policy, and other areas as they relate to China, the idea being that China is both already a "crossroads" of the world and itself at a "crossroads" in terms of its future global influence. For more information, contact Frank Tsai at <u>editor@shanghai-review.org</u>.