

## Curriculum Vita

Name: **Guangxiao Hu**

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### Education

08/2019-present **PhD in Department of Geographical Sciences, University of Maryland**

09/2016-07/2019 **Master of Science in School of Environment and Energy, Peking University**

Major: Environmental Science (Grade: 92.08/100)

Supervisor: Prof. Xiaoming Ma

09/2012-06/2016 **Bachelor of Economy in School of Economy and Trade, Hunan University**

Major: International Economics and Trade (GPA: 3.89/4.5; Grade: 88.31/100)

Thesis Title: The Transfer of Multi-regional Carbon Emissions within China -- Based on MRIO Model from Demand-side and Supply-side Perspective (under Prof. Rui Xie's guidance)

### Publication

- [1] Guangxiao Hu, Lu Sun, Xiaoming Ma, Junping Ji. Influencing Factors of CO<sub>2</sub> Emissions in China's Manufacturing -- An Analysis Based on Manufacturing Structural Changes. *Advances in Engineering Research*, 2016, 63: 621-627, (WOS:000391718500112).
- [2] Rui Xie, Guangxiao Hu, Youguo Zhang, et al. Provincial Transfers of Enabled Carbon Emissions in China: A Supply-side Perspective. *Energy Policy* 2017, 107: 688-697 (doi: 10.1016/j.enpol.2017.04.021).
- [3] Guangxiao Hu, Xiaoming Ma, Junping Ji. Stochastic Optimization Model for Carbon Mitigation Path under Demand Uncertainty of the Power Sector in Shenzhen, China. *Sustainability* 2017, 9, 1942; (doi:10.3390/su9111942).
- [4] Junping Ji, Guangxiao Hu, Yiwei Wu, et al. China's Fast Growing CO<sub>2</sub> Emissions Driven by Increasing Consumption in 1992-2012: A Structural Decomposition Analysis. *IOP Conf. Series: Earth and Environmental Science*, 2017, 59 (doi:10.1088/1755-1315/59/1/012051).
- [5] Guangxiao Hu, Xiaoming Ma, Junping Ji. Scenarios and Policies for Sustainable Urban Energy Development Based on LEAP Model -- a Case Study of a Postindustrial City: Shenzhen China. *Applied Energy* 2019, 238: 876–886.

### Research Experience

07/2017-Present **Shenzhen energy-saving and carbon-reduction data platform and Analysis technology engineering Laboratory**

Responsibilities: Took part in the application and operation of the laboratory; including building the data platform for Shenzhen GHG emission inventory, collecting main models used in the field of energy-saving and carbon-reduction (LEAP, MARKAL/TIMES, OseMOSYS etc.).

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08/2017-04/2018 **Project “Leader and pioneer: the pattern, path and challenge of low carbon development of Shenzhen”** sponsored by World Bank/Global Environment Facility

Responsibilities: Finished the report of chapter 9 “Low carbon transportation” and chapter 15 “Prediction of future carbon emission in Shenzhen”.

01/2017-09/2017 **Project “Decomposition of target in achieving carbon emission peak in Shenzhen”** sponsored by China Shenzhen Emission Rights Exchange

Responsibilities: Proposed a LEAP-Shenzhen scenario analysis framework to calculate energy consumption and carbon emission in Shenzhen, and analysed its carbon mitigation path.

10/2016-02/2017 **Project “Compilation of greenhouse gas inventories in Shenzhen from 2012 to 2015”** sponsored by Development and Reform Commission of Shenzhen Municipality

Responsibilities: Compiled greenhouse gas inventories in energy industries, including GHG emissions in coal-fired power plant, gas-fired power plant, waste-to-energy power plant, and fugitive emissions in natural gas transmission.

04/2015-10/2016 **Project “The impact of environmental regulation on energy-economy-environment system and path choice of regulation: Based on dynamic CGE model”** sponsored by the National Natural Science Foundation of China

Responsibilities: Conducted literature review about the standard of environmental regulations classification; investigated relevant environmental regulations.

### Research Interests

Estimation of greenhouse gas emissions and their influencing factors;

Research about carbon mitigation path and carbon mitigation policy;

Research about carbon emission embodied in trade using input-output analysis;

Pollution haven hypothesis in China and pollution terms of trade.

### Honours and awards

10/2018 National Scholarship (3 times, top 0.2%)

09/2017 First Scholarship in School of Environment and Energy, Peking University (Top 5%)

12/2017 Merit student, Peking University (Top 5%)

06/2016 The honour of outstanding graduates in Hunan Province (Top 2%)

09/2015 Merit student, Hunan University (Top 5%)

12/2014 The honour of outstanding student leader, Hunan University (Top 3%)

### Skills

Computing Mastery of Microsoft office; Good command of LEAP, Matlab, Eviews, SPSS

Languages Mandarin Chinese (mother tongue); English (TOEFL 103)

Technical skill Familiar with Input-output analysis

Good command of LEAP analysis framework

Good at data processing and data analysis