Dai Hancheng (Ph.D.)

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Assistant Professor

Ph.D. in Environmental Economics

Research Keywords: Dr. Dai's research has been focusing on developing the state-of-the-art integrated assessment models to find out how the society could transit into a **low-carbon and sustainable future** at the local, national and global scales. Using these models, he explored key questions such as the mitigation cost of achieving the Copenhagen targets, Nationally Determined Contributions (NDCs) for the Paris Agreement and 2°C degree targets in China, the co-benefits of climate mitigation on air pollution improvement, human health improvement, water saving and resource efficiency, as well as the effects of emission trading policy in China. More recent publications are available at University homepage or Personal Homepage or Google Scholar or Researchgate.

Professional Experience

Position

2017/10 – present — **Executive Director.** International Project Office of Monsoon Asia Integrated Research for Sustainability, Future Earth (MAIRS-FE).

2017/1 – present — **Assistant Professor.** College of Environmental Sciences and Engineering, Peking University.

2013/01 – 2016/12 — **Research Associate.** Integrated Environment and Economics Section, Center for Social and Environmental Systems Research, National Institute for Environmental Studies, Japan.

2009/04 – 2009/09 — **Research Assistant.** Integrated Assessment Modeling Section, National Institute for Environmental Studies, Japan.

Lectures

Environmental Research Method — **3 hours** per week.

Introduction to Environmental Science & Engineering — **2 hours** per semester.

Research

CGE model — Development of Intergrated Model of Economy, Energy and Environment for Sustainable Development of China, which is a multi-sector, multi-region, recursive dynamic computable general equilibrium (CGE) model of China and the world.

Energy system analysis — Development and application of bottum-up type energy system optimization model.

Education

2009/10 – 2012/12 **Ph.D., Tokyo Institute of Technology, Japan** in Social Engineering.
Thesis title: *Integrated assessment of China's provincial low-carbon economy development towards 2030: Jiangxi Province as an example*.

2006/10 – 2009/03 **M.Sc., Technical University of Munich, Germany** in Environmental Planning and Engineering Ecology.
Core field: *Renewable resources and renewable energy*.

2002/09 – 2006/07 **B.Sc., Peking University, China** in Environmental Science.

Research Publications

Journal Articles: First or Corresponding Author (SCI)

1. Li, Zhaoling, **Hancheng Dai***, Lu Sun, Yang Xie, Zhu Liu, Peng Wang and Helmut Yabar (2018). *Exploring the impacts of regional unbalanced carbon tax on CO_2 emissions and industrial competitiveness in Liaoning province of China*. In: *Energy Policy* vol. 113, pp. 9–19. URL: https://www.sciencedirect.com/science/article/pii/S0301421517307218.

2. Xie, Yang, **Hancheng Dai*** and Huijuan Dong (2018). *Impacts of SO2 taxations and renewable energy development on CO_2, NO_x and SO_2 emissions in Jing-Jin-Ji region*. In: *Journal of Cleaner Productions* vol. 171, pp. 1386–1395. URL: http://www.sciencedirect.com/science/article/pii/S0959652617323508.

3. **Dai, Hancheng**, Shinichiro Fujimori, Diego Silva Herran, Hiroto Shiraki, Toshiko Masui and Yuzuru Matsuoka (2017). *The impacts on climate mitigation costs of considering curtailment and storage of variable renewable energy in a general equilibrium model*. In: *Energy Economics* vol. 64, pp. 627–637. URL: http://www.sciencedirect.com/science/article/pii/S0140988316300391.

4. Dong, Huijuan, **Hancheng Dai***, Tsuyoshi Fujita, Yong Geng, Yang Xie, Toshihiko Masui and Zhe Liu (2017). *Exploring impact of carbon tax on China's industrial CO_2 reductions and provincial disparities*. In: *Renewable & Sustainable Energy Reviews* vol. 77, pp. 596–603. URL: http://www.sciencedirect.com/science/article/pii/S1364032117305488.

5. **Hancheng Dai**, Yang Xie, Jingyu Liu and Toshihiko Masui (2017). *Aligning renewable energy targets with carbon emissions trading to achieve China's INDCs: A general equilibrium assessment*. In: *Renewable & Sustainable Energy Reviews*. URL: http://www.sciencedirect.com/science/article/pii/S136403211731434X.

6. **Hancheng Dai**, Haibin Zhang and Wentao Wang (2017). *The impacts of U.S. withdrawal from the Paris Agreement on the carbon emission space and mitigation cost of China, EU, and Japan under the constraints of the global carbon emission space*. In: *Advances in Climate Change Research* vol. 13.9. URL: http://www.sciencedirect.com/science/article/pii/S1674927817301016.

7. Li, Mingquan, **Hancheng Dai***, Yang Xie, Ye Tao, Lars Bregnbaek and Kaare Sandholt (2017). *Water conservation from power generation in China: a provincial level scenario towards 2030*. In: *Applied Energy* vol. 208, pp. 580–591. URL: http://www.sciencedirect.com/science/article/pii/S0306261917313764.

8. Mittal, Shivika, **Hancheng Dai***, Shinichiro Fujimori, Tatsuya Hanaoka and Runsen Zhang (2017). *Key factors influencing the global passenger transport dynamics using the AIM/Transport model*. In: *Transportation Research Part D: Transport and Environment* vol. 55, pp. 373–388. URL: http://www.sciencedirect.com/science/article/pii/S1361920916300451.

9. Tian, Xu, **Hancheng Dai***, Yong Geng, Zhen Huang, Toshihiko Masui and Tsuyoshi Fujita (2017). *The effects of carbon reduction on sectoral competitiveness in China: a case of Shanghai*. In: *Applied Energy* vol. 197, pp. 270–278. URL: http://www.sciencedirect.com/science/article/pii/S0306261917304221.

10. Wu, Rui, **Hancheng Dai***, Yong Geng, Yang Xie, Toshihiko Masui, Zhiqing Liu and Yiying Qian (2017). *Economic Impacts from $PM_{2.5}$ Pollution-Related Health Effect: A Case Study in Shanghai*. In: *Environmental Science & Technology* vol. 51.9, pp. 5035–5042. URL: http://pubs.acs.org/doi/abs/10.1021/acs.est.7b00026.

11 Cheng, Beibei, **Hancheng Dai***, Peng Wang, Yang Xie, Li Chen, Daiqing Zhao and Toshihiko Masui (2016). *Impacts of low-carbon power policy on carbon mitigation in Guangdong Province, China*. In: *Energy Policy* vol. 88, pp. 515–527. URL: http://www.sciencedirect.com/science/article/pii/S0301421515301841.

12 **Dai, Hancheng**, Diego Silva Herran, Shinichiro Fujimori and Toshihiko Masui (2016). *Key factors affecting long-term penetration of global onshore wind energy integrating top-down and bottom-up approaches*. In: *Renewable Energy* vol. 85, pp. 19–30. URL: http://www.sciencedirect.com/science/article/pii/S0960148115300239.

13 **Dai, Hancheng**, Peggy Mischke, Xuxuan Xie, Yang Xie and Toshihiko Masui (2016). *Closing the gap? Top-down versus bottom-up projections of China's regional energy use and CO_2 emissions*. In: *Applied Energy* vol. 162. **ESI 1% Highly Cited Paper in 2016-17**, pp. 1355–1373. URL: http://www.sciencedirect.com/science/article/pii/S0306261915008272.

14 **Dai, Hancheng**, Xuxuan Xie, Yang Xie, Jian Liu and Toshihiko Masui (2016). *Green growth: The economic impacts of large-scale renewable energy development in China*. In: *Applied Energy* vol. 162. **ESI 1% Highly Cited Paper in 2016-17**, pp. 435–449. URL: http://www.sciencedirect.com/science/article/pii/S0306261915012763.

15 Mittal, Shivika, **Hancheng Dai***, Shinichiro Fujimori and Toshihiko Masui (2016). *Bridging greenhouse gas emissions and renewable energy deployment target: Comparative assessment of China and India*. In: *Applied Energy* vol. 166. **ESI 1% Highly Cited Paper in 2016-17**, pp. 301–313. URL: http://www.sciencedirect.com/science/article/pii/S0306261916000118.

16 Mittal, Shivika, **Hancheng Dai*** and P. R. Shukla (2016). *Low carbon urban transport scenarios for China and India: A comparative assessment*. In: *Transportation Research Part D: Transport and Environment* 44, pp. 266–276. URL: http://www.sciencedirect.com/science/article/pii/S1361920915000346.

17 Tian, Xu, Yong Geng, **Hancheng Dai***, Tsuyoshi Fujita, Rui Wu, Zhe Liu, Toshihiko Masui and Yang Xie (2016). *The effects of household consumption pattern on regional development: A case study of Shanghai*. In: *Energy* vol. 103, pp. 49–60. URL: http://www.sciencedirect.com/science/article/pii/S036054421630202X.

18 Wu, Rui, **Hancheng Dai***, Yong Geng, Yang Xie, Toshihiko Masui and Xu Tian (2016). *Achieving China's INDC through carbon cap-and-trade: Insights from Shanghai*. In: *Applied Energy* vol. 184, pp. 1114–1122. URL: http://www.sciencedirect.com/science/article/pii/S1876610214032822.

19 Xie, Yang, **Hancheng Dai***, Huijuan Dong, Tatsuya Hanaoka and Toshihiko Masui (2016a). *Economic impacts from $PM_{2.5}$ pollution-related health effects in China: A provincial-level analysis*. In: *Environmental Science & Technology* vol. 50.9, pp. 4836–4843. URL: http://pubs.acs.org/doi/abs/10.1021/acs.est.5b05576.

20 Wang, Peng, **Hancheng Dai***, Songyan Ren, Daiqing Zhao and Toshihiko Masui (2015). *Achieving Copenhagen target through carbon emission trading: Economic impacts assessment in Guangdong Province of China*. In: *Energy* vol. 79, pp. 212–227. URL: http://www.sciencedirect.com/science/article/pii/S0360544214012638.

21 **Dai, Hancheng**, Toshihiko Masui, Yuzuru Matsuoka and Shinichiro Fujimori (2012). *The impacts of China's household consumption expenditure patterns on energy demand and carbon emissions towards 2050*. In: *Energy Policy* vol. 50, pp. 736–750. URL: http://www.sciencedirect.com/science/article/pii/S0301421512007057.

22 **Dai, Hancheng**, Toshihiko Masui, Yuzuru Matsuoka and Shinichiros Fujimori (2011). *Assessment of China's climate commitment and non-fossil energy plan towards 2020 using hybrid AIM/CGE model*. In: *Energy Policy* vol. 39.5, pp. 2875–2887. URL: http://www.sciencedirect.com/science/article/pii/S0301421511001558.

23 Xie, Yang, **Hancheng Dai***, Yanxu Zhang, Tatsuya Hanaoka and Toshihiko Masui (Discussion paper). *Economic impacts from ozone pollution-related health effects in China: A provincial-level analysis*. In: *Atmospheric Chemistry and Physics*. URL: https://www.atmos-chem-phys-discuss.net/acp-2017-849.

24 Wang, Heming, **Hancheng Dai***, Liang Dong, Yang Xie, Yong Geng, Qiang Yue, Fengmei Ma, Jian Wang and Tao Du (In press). *The co-benefit of carbon mitigation on resource use in China*. In: *Journal of Cleaner Production*. URL: https://www.sciencedirect.com/science/article/pii/S0959652617327282.

Journal Articles: Other

1. Zhang, Runsen, Shinichiro Fujimori, **Hancheng Dai** and Tatsuya Hanaoka (2018). 'Contribution of transport sector to global climate mitigation: insights from a global passenger transport model coupled with a computable general equilibrium model'. In: *Applied Energy* 211, pp. 76–88. URL: https://www.sciencedirect.com/science/article/pii/S0306261917315490.

2. Zhang, Haibin, **Hancheng Dai**, Huaxia Lai and Wentao Wang (2017). 'U.S. withdrawal from the Paris Agreement: reasons, impacts, and China's response'. In: *Advances in Climate Change Research* 13.9. URL: http://www.sciencedirect.com/science/article/pii/S1674927817301028.

3. Fujimori, Shinichiro, **Hancheng Dai**, Toshihiko Masui and Yuzuru Matsuoka (2016). 'Global energy model hindcasting'. In: *Energy* 114, pp. 293–301. URL: http://www.sciencedirect.com/science/article/pii/S0360544216311112.

4. Fujimori, Shinichiro, Tomoko Hasegawa, Toshihiko Masui, Kiyoshi Takahashi, Diego Shilva Herran, **Hancheng Dai**, Yasuaki Hijioka and Mikiko Kainuma (2016a). 'SSP3: AIM Implementation of Shared Socioeconomic Pathways'. In: *Global Environmental Change* 42, pp. 268–283. URL: http://www.sciencedirect.com/science/article/pii/S0959378016300838.

5. Fujimori, Shinichiro, Izumi Kubota, **Hancheng Dai**, Kiyoshi Takahashi, Tomoko Hasegawa, JingYu Liu, Yasuaki Hijioka, Toshihiko Masui and Maho Takimi (2016b). 'Will International Emissions Trading Help Achieve the Objectives of the Paris Agreement?' In: *Environmental Research Letters* 11.10, p. 104001. URL: http://iopscience.iop.org/article/10.1088/1748-9326/11/10/104001/meta.

6. Herran, Diego Silva, **Hancheng Dai**, Shinichiro Fujimori and Toshihiko Masui (2016). 'Global assessment of onshore wind power resources considering the distance to urban areas'. In: *Energy Policy* 91, pp. 75–86. URL: http://www.sciencedirect.com/science/article/pii/S0301421515302366.

7. Ren, Songyan, Peng Wang, Zhao Daiqing and **Hancheng Dai** (2016). 'Research on Carbon Emissions Cap and Emission Reduction Path of Key Industries in Guangdong Province Based on CGE Model'. In: *Ecological Economy (In Chinese)* 32.7, pp. 69–73. URL: http://www.cqvip.com/qk/96795x/201607/669336330.html.

8. Tian, Xu, **Hancheng Dai** and Yong Geng (2016). 'The Effect of household consumption changes on regional low-carbon development: A case study of Shanghai'. In: *China Population, Resources and Environment (In Chinese)* 26.5, pp. 55–63. URL: http://www.cqvip.com/qk/97796x/201605/690718290201605007.html.

9. Xie, Yang, **Hancheng Dai***, Huijuan Dong, Tatsuya Hanaoka and Toshihiko Masui (2016b). 'Health and economic impacts of $PM_{2.5}$ pollution in Jing-Jin-Ji Area'. In: *China population, resources and environment (In Chinese)* 26.11, pp. 20–28. URL: http://www.cqvip.com/qk/97796x/201611/670596305.html.

10. Cheng, Beibei, **Hancheng Dai**, Peng Wang, Daiqing Zhao and Toshihiko Masui (2015). 'Impacts of carbon trading scheme on air pollutant emissions in Guangdong Province of China'. In: *Energy for Sustainable Development* 27, pp. 174–185. URL: http://www.sciencedirect.com/science/article/pii/S0973082615000563.

11. Dong, Huijuan, **Hancheng Dai**, Liang Dong, Tsuyoshi Fujita, Yong Geng, Zbigniew Klimont, Tsuyoshi Inoue, Shintaro Bunya, Minoru Fujii and Toshihiko Masui (2015). 'Pursuing air pollutant co-benefits of CO_2 mitigation in China: a provincial leveled analysis'. In: *Applied Energy* 144, pp. 165–174. URL: http://www.sciencedirect.com/science/article/pii/S030626191500197X.

12. Ren, Songyan, **Hancheng Dai**, Peng Wang, Daiqing Zhao and Toshihiko Masui (2015). 'Economic Impacts of Carbon Emission Trading: Case Study on Guangdong Province'. In: *Advances in Climate Change Research (in Chinese)* 11.1, pp. 61–67. URL: http://www.cqvip.com/qk/88473x/201501/663660054.html.

13. Rui, Xing, Hanaoka Tatsuya, Kanamori Yuko, **Hancheng Dai** and Masui Toshihiko (2015). 'An impact assessment of sustainable technologies for the Chinese urban residential sector at provincial level'. In: *Environmental Research Letters* 10.6, p. 065001. URL: http://iopscience.iop.org/article/10.1088/1748-9326/10/6/065001/meta.

14. Xing, Rui, Tatsuya Hanaoka, Yuko Kanamori, **Hancheng Dai** and Toshihiko Masui (2015). 'Energy Service Demand Projections and CO_2 Reduction Potentials in Rural Households in 31 Chinese Provinces'. In: *Sustainability* 7.12, pp. 15833–15846. URL: http://www.mdpi.com/2071-1050/7/12/15789/htm.

15. **Dai, Hancheng** and Peggy Mischke (2014). 'Future energy consumption and emissions in East-, Central- and West-China: insights from soft-linking two global models'. In: *Energy Procedia* 61, pp. 2584–2587. URL: http://www.sciencedirect.com/science/article/pii/S1876610214032822.

16. Fujimori, Shinichiro, Mikiko Kainuma, Toshihiko Masui, Tomoko Hasegawa and **Hancheng Dai** (2014). 'The effectiveness of energy service demand reduction: A scenario analysis of global climate change mitigation'. In: *Energy policy* 75, pp. 379–391. URL: http://www.sciencedirect.com/science/article/pii/S0301421514005060.

17. Wang, Peng, **Hancheng Dai** and Daiqing Zhao (2014). 'Assessment of Guangdong carbon emission trading based on GD_CGE model'. In: *Acta Scientiae Circumstantiae (In Chinese)* 34.11, pp. 2925–2931. URL: http://www.actasc.cn/hjkxxb/ch/reader/create_pdf.aspx?file_no=20140113008&year_id=2014&quarter_id=11&falg=1.

18. **Dai, Hancheng** and Toshihiko Masui (2012a). 'Assessing the Contribution of Carbon Emissions Trading in China to Carbon Intensity Reduction'. In: *Energy Science and Technology* 4.1, pp. 1–8. URL: http://www.cscanada.net/index.php/est/article/view/2756.

19. Pan, Bo, Baoshan Xing, Shu Tao, Wenxin Liu, Xiumei Lin, Yang Xiao, **Hancheng Dai**, Xianming Zhang, Yanxv Zhang and Huishi Yuan (2007). 'Effect of physical forms of soil organic matter on phenanthrene sorption'. In: *Chemosphere* 68.7, pp. 1262–1269. URL: http://www.sciencedirect.com/science/article/pii/S0045653507001737.

20. Pan, Bo, Baoshan Xing, Wenxin Liu, Shu Tao, Xiumei Lin, Yanxv Zhang, Huishi Yuan, **Hancheng Dai**, Xianming Zhang and Yang Xiao (2006). 'Two-compartment sorption of phenanthrene on eight soils with various organic carbon contents'. In: *Journal of Environmental Science and Health Part B* 41.8, pp. 1333–1347. URL: http://www.tandfonline.com/doi/abs/10.1080/03601230600964043.

Journal Articles: Under Review

1. Su, Qiong, **Hancheng Dai***, Yun Lin, Yang Xie, Huan Chen and R. Karthikeyan (Under review). *A CGE-based integrated model for water management under CO_2 mitigation scenario in a rapidly urbanizing catchment*. In: *Applied Energy*.

Journal Articles: In Preparation

1. Du, Feng, **Hancheng Dai***, Lixuan Hong and Yang Xie (In preparation). *The impact of Carbon taxation policy on the industrial competitiveness in Chongqing*. In:

2. **Hancheng Dai***, Xinghan Xu, Yang Xie, Shinichiro Fujimori, Gakuji Kurata and Tomoko Hasegawa (In preparation). *Assessing Health and Economic Impacts of Air Pollution in Asia under SSP and mitigation scenarios*. In:

3. **Hancheng Dai***, Yanxu Zhang and Yang Xie (In preparation). *Assessing the externality cost of developing renewable energy in China*. In:

Conference Proceedings

1. **Dai, Hancheng**, Heming Wang, Liang Dong, Yang Xie and Toshihiko Masui (2016). 'Co-benefit of carbon mitigation on resource use'. In: *International Society for Industrial Ecology (ISIE) 12th Socio-Economic Metabolism section conference and 5th Asia-Pacific conference*. Nagoya, Japan, September 27-30, 2016.

2. **Dai, Hancheng**, Yang Xie and Toshihiko Masui (2016). 'Achieving carbon emissions peak in China by 2030: the key options and economic impacts'. In: *Poster in the Ninth Annual Meeting of the IAMC*. Beijing, China, December 4-8, 2016.

3. **Dai, Hancheng**, Yang Xie, Toshihiko Masui and Tatsuya Hanaoka (2016). 'Economic impacts from $PM_{2.5}$ and Ozone pollution-related health effects in China'. In: *International Conference on Air Benefit and Cost and Attainment Assessment*. Shanghai, China, June 14-16, 2016.

4. Xie, Yang, **Dai, Hancheng**, Xinghan Xu, Shinichiro Fujimori, Kurata Gakuji and Tomoko Hasegawa (2016). 'Assessing Health and Economic Impacts of Air Pollution in Asia under SSP and mitigation scenarios'. In: *The Ninth Annual Meeting of the IAMC*. Beijing, China, December 4-8, 2016.

5. Xie, Yang, **Hancheng Dai**, Toshihiko Masui and Tatsuya Hanaoka (2016). 'Economic impacts from $PM_{2.5}$ and Ozone pollution-related health effects in China'. In: *The 11th International Air Quality Conference*. Milan, Italy, June 14-16, 2016.

6. Fujimori, Shinichiro, **Hancheng Dai**, Toshihiko Masui and Yuzuru Matsuoka (2015). 'Global Energy Model Hindcasting and Validation'. In: *Eighth Annual Meeting of the Integrated Assessment Modeling Consortium*. Potsdam, Germany, November 16-18, 2015.

7. **Dai, Hancheng** and Toshihiko Masui (2014a). 'China's provincial carbon intensity change and mitigation costs towards 2030'. In: *The 4th Congress of the East Asian Association of Environmental and Resource Economics,* Busan, South Korea, February 12-14, 2014.

8. — (2014b). 'Exploring China's energy scenario towards 2030 with a multi-region CGE model'. In: *The 4th International Association for Energy Economics Asian Conference*. Beijing, China, September 19-21, 2014.

9. **Dai, Hancheng**, Peggy Mischke and Toshihiko Masui (2014). 'China's future energy consumption and emission pathways: Insights from soft-linking two global modelsl'. In: *The 6th International Conference on Applied Energy - ICAE2014*. Taipei, Taiwan, May 30 - June 2, 2014.

10. **Dai, Hancheng** and Toshihiko Masui (2013). 'Energy Transition in China towards 2-degree global target'. In: *Low Carbon Asia Research Network (LoCARNet) Second Annual Meeting*. Yokohama, Japan, 24 July, 2013.

11. Herran, Diego Silva, **Hancheng Dai**, Shinichiro Fujimori and Toshihiko Masui (2013). 'Assessment of the onshore wind energy supply with AIM model'. In: *Poster in The 6th Annual IAMC Meetings*. Tsukuba, Japan, December 15-17, 2013.

12. **Dai, Hancheng** and Toshihiko Masui (2012b). 'Assessing the Contribution of Inter-provincial Carbon Emissions Trading in China to Carbon Intensity Reduction in 2020'. In: *The 2nd Congress of the East Asian Association of Environmental and Resource Economics*. Bandung, Indonesia, February 2-5, 2012.

13. — (2010a). 'Contribution of China's Renewable Energy Development in Power Generation to Carbon Intensity Reduction'. In: *The 1st Congress of the East Asian Association of Environmental and Resource Economics*. Sapporo, Japan, August 18-19, 2010.

14. — (2010b). 'Impact Assessment of China's Climate Target towards 2020'. In: *The 15th Asia-Pacific Integrated Model International Workshop*. Tsukuba, Japan, February 20-22, 2010.

Books and Chapters

1. Fujimori, Shinichiro, Izumi Kubota, **Hancheng Dai**, Kiyoshi Takahashi, Tomoko Hasegawa, Jing-Yu Liu, Yasuaki Hijioka, Toshihiko Masui and Maho Takimi (2017). 'The Effectiveness of the International Emissions Trading under the Paris Agreement'. In: *Post 2020 climate action: global and asian perspectives*. Ed. by Toshihiko Masui Shinichiro Fujimori Mikiko Kainuma. Singapore: Springer.

2. **Hancheng Dai** and Toshihiko Masui (2017). 'Achieving carbon emissions peak in China by 2030: the key options and economic impacts'. In: *Post 2020 climate action: global and asian perspectives*. Ed. by Toshihiko Masui Shinichiro Fujimori Mikiko Kainuma. Singapore: Springer.

3. Shukla, P. R., Shivika Mittal, Jing-Yu Liu, Shinichiro Fujimori, **Hancheng Dai** and Runsen Zhang (2017). 'India INDC Assessment: Emission Gap Between Pledged Target and 2 °C Target'. In: *Post 2020 climate action: global and asian perspectives*. Ed. by Toshihiko Masui Shinichiro Fujimori Mikiko Kainuma. Singapore: Springer.

4 Mischke, Peggy and **Hancheng Dai** (2015a). 'Economic Impacts of Future Changes in the Energy System—Global Perspectives'. In: *Informing Energy and Climate Policies Using Energy Systems Models*. Ed. by James Glynn, Patrícia Fortes, Anna Krook-Riekkola, Maryse Labriet, Marc Vielle, Socrates Kypreos, Antti Lehtilä, Peggy Mischke, **Hancheng Dai** and Maurizio Gargiulo. Springer International Publishing, pp. 333–358.

5 — (2015b). 'Economic Impacts of Future Changes in the Energy System—National Perspectives'. In: *Informing Energy and Climate Policies Using Energy Systems Models*. Ed. by James Glynn, Patrícia Fortes, Anna Krook-Riekkola, Maryse Labriet, Marc Vielle, Socrates Kypreos, Antti Lehtilä, Peggy Mischke, **Hancheng Dai** and Maurizio Gargiulo. Springer International Publishing, pp. 359–387.

Skills

Languages	Native for Mandarin Chinese. Strong reading, writing and speaking competencies for English. Moderate reading, writing and speaking competencies for German and Japanese.
Coding	GAMS, Python, R, LaTeX.
Misc.	Academic research, teaching, training, consultation, LaTeX typesetting and publishing.

Miscellaneous Experience

Refereeing

Journal — Nature Climate Change; Energy Policy; Energy Economics; Environment, Development and Sustainability; International Journal of Energy Research; Renewable Energy; Journal of Cleaner Production; Ecological Indicators; Economic Modelling; Applied Energy; Sustainability; Journal of Environmental Planning and Management; Science of the Total Environment; The Energy Journal; Frontiers in Energy; Nature Hazards; Omega; Journal of Environmental Planning and Management.