****个人简介：****

张达，清华大学能源环境经济研究所所长助理、长聘副教授，博士生导师，兼任清华三峡气候与低碳中心副主任、清华碳中和研究院气候治理与碳金融中心副主任，在气候变化政策和能源电力系统规划研究领域有长期积累。获得海外高层次人才青年项目资助，担任气候变化经济学领域重要期刊Climatic Change、Journal of Global Economic Analysis副主编。从2009年开始，持续开展能源经济综合评估建模、高比例可再生能源电力系统装机与运行优化研究，牵头开发了中国分区能源经济模型（C-REM）、中国全球能源经济模型（C-GEM）、中国可再生能源电力规划及运行模式（REPO）、高时空分辨率可再生能源布局与电力系统优化模式（RESPO）、中国分区综合评估模式（REACH）等具有自主知识产权、支撑我国多项能源与气候变化领域重要战略政策制定的定量工具，并主持了包括国家自然科学基金、国家发改委、国家能源局、生态环境部、国家电网、南方电网、世界银行、亚洲开发银行、国际能源署、美国环保协会等机构资助的多项我国能源系统转型相关的研究项目，主持项目总金额超过2300 万元。以上研究工作形成的成果以论文形式在 Nature Climate Change（一篇第一作者、一篇共同第一作者）、Nature Energy（一篇第一作者、一篇共同第一作者）、Joule（一篇共同通讯作者）、One Earth（一篇共同通讯作者）、Lancet Planetary Health（一篇共同通讯作者）、Environmental and Resource Economics、Energy Economics、Climate Change Economics、Economics of Energy and Environmental Policy、Climatic Change、Climate Policy、Energy Policy、Applied Energy、Energy、Resources, Conservation and Recycling 以及《管理世界》等国内外知名期刊发表数十篇，形成与国际能源署联合发布的报告两部，产生了较为广泛的社会影响。还受邀担任 “Blue Planet Prize” 提名专家和 “Lindau Meeting on Economic Sciences”评审专家。

个人主页 [www.energyda.cn](http://www.energyda.cn/)

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Yi Song, Xiaohu Luo, Yuhao Lu, Jueying Qian, Wei Zhang, Liangke Liu, Junling Huang, Xiaolu Zhao, Da Zhang. Improving the data quality of CO2 continuous emissions monitoring systems: In the context of China's emissions trading scheme. Environmental Impact Assessment Review,2025, 115: 108037.

Zhenhua Zhang, Ziheng Zhu, Xi Lu, Da Zhang, Michael R Davidson. [Ratcheting up wind and solar targets for decarbonizing the power sector in China and beyond](https://www.cell.com/cell-reports-sustainability/fulltext/S2949-7906%2825%2900085-0%22%20%5Ct%20%22https%3A//scholar.google.com.hk/_blank). Cell Reports Sustainability, 2025, In Press.

Jiaying Li, Xiaoye Zhang, Lifeng Guo, Junting Zhong, Liangke Liu, Chongyuan Wu, Da Zhang, Fei Yu, Bo Peng. [Research on China’s Carbon Footprint Accounting Based on a High-Precision CO2 Emission Inventory](https://www.mdpi.com/2071-1050/17/6/2647%22%20%5Ct%20%22https%3A//scholar.google.com.hk/_blank).Sustainability, 2025, 17(16): 2647.

Da Zhang, Valerie J Karplus. [Management practices and manufacturing firm responses to a randomized energy audit](https://www.nature.com/articles/s41560-025-01729-5%22%20%5Ct%20%22https%3A//scholar.google.com.hk/_blank). Nature Energy, 2025, 10: 557–568.

Hantang Peng, Chenfei Qu, Valerie J Karplus, Da Zhang. [The C-REM 4.0 model: A CGE model for provincial analysis of China’s carbon neutrality target](https://www.researchgate.net/profile/Hantang-Peng/publication/380972836_The_C-REM_40_model_A_CGE_model_for_provincial_analysis_of_China%27s_carbon_neutrality_target/links/66aadc22c6e41359a84fe579/The-C-REM-40-model-A-CGE-model-for-provincial-analysis-of-Chinas-carbon-neutrality-target.pdf%22%20%5Ct%20%22https%3A//scholar.google.com.hk/_blank). Energy Clim. Manage.,2025, 1: 9400006.

Xianling Long, Nicolas Astier, Da Zhang. [Is broader trading welfare improving for emission trading systems?](https://www.sciencedirect.com/science/article/pii/S0095069624001840%22%20%5Ct%20%22https%3A//scholar.google.com.hk/_blank) Journal of Environmental Economics and Management, 2025,130: 103110.

Hongyu Zhang, Heng Liang, Da Zhang, Junling Huang, Xiliang Zhang. [Options to enhance China’s national emission trading system design for carbon neutrality](https://www.tandfonline.com/doi/abs/10.1080/14693062.2024.2375586%22%20%5Ct%20%22https%3A//scholar.google.com.hk/_blank). Climate Policy,2025, 25(2): 240-256.

Ziheng Zhu, Da Zhang, Xiaoye Zhang, Xiliang Zhang. [Integrated modeling for the transition pathway of China's power system](https://pubs.rsc.org/en/content/articlehtml/2025/ee/d5ee00355e%22%20%5Ct%20%22https%3A//scholar.google.com.hk/_blank). Energy & Environmental Science, 2025, 18(8): 3699-3717.

Hongyu Zhang, Wangzhen Deji, Daniel Farinotti, Da Zhang, Junling Huang. [The role of Xizang in China's transition towards a carbon-neutral power system](https://www.sciencedirect.com/science/article/pii/S0360544224036685%22%20%5Ct%20%22https%3A//scholar.google.com.hk/_blank). Energy, 2024, 313: 133890.

Runxin Yu, Shiping Ma, Da Zhang, Xiliang Zhang. [Forest vegetation increased across China’s carbon offset projects and positively impacted neighboring areas](https://www.nature.com/articles/s43247-024-01962-y%22%20%5Ct%20%22https%3A//scholar.google.com.hk/_blank). Communications Earth & Environment, 2024, 5(1): 767.

Yi Song, Sennan Kuang, Junling Huang, Da Zhang. [Unsupervised anomaly detection of industrial building energy consumption](https://www.sciencedirect.com/science/article/pii/S2666123324001144%22%20%5Ct%20%22https%3A//scholar.google.com.hk/_blank). Energy and Built Environment, 2024, [In Press](https://www.sciencedirect.com/journal/energy-and-built-environment/articles-in-press).

Xiaoye Zhang, Junting Zhong, Xiliang Zhang, Da Zhang, Changhong Miao, Deying Wang, Lifeng Guo. China Can Achieve Carbon Neutrality in Line with the Paris Agreement’s 2 °C Target: Navigating Global Emissions Scenarios, Warming Levels, and Extreme Event Projections. [Engineering](https://www.sciencedirect.com/journal/engineering%22%20%5Co%20%22Go%20to%20Engineering%20on%20ScienceDirect), 2025, 44: 207-214.

Han-Tang Peng, Da Zhang, Jun-Ting Zhong, Li-Feng Guo, Si-Yue Guo, Jun-Ling Huang, De-Ying Wang, Chang-Hong Miao, Xi-Liang Zhang, Xiao-Ye Zhang. [Representative CO2 emissions pathways for China's provinces toward carbon neutrality under the Paris Agreement's 2° C target](https://www.sciencedirect.com/science/article/pii/S1674927824001552%22%20%5Ct%20%22https%3A//scholar.google.com.hk/_blank). Advances in Climate Change Research, 2024, 15(6): 1096-1106.

Guannan He, Yongkang Ding, Zhengrun Wu, Xinjiang Chen, Da Zhang, Jie Song. [Environment-Adaptive Online Learning for Portable Energy Storage Based on Porous Electrode Model](https://ieeexplore.ieee.org/abstract/document/10737665/%22%20%5Ct%20%22https%3A//scholar.google.com.hk/_blank). IEEE Transactions on Automation Science and Engineering, 2024, 22: 8386 - 8399.

Runxin Yu, Da Zhang, Xiliang Zhang. [Introducing auctioning in China’s national carbon market: lessons from international and domestic practices](https://www.tandfonline.com/doi/abs/10.1080/14693062.2024.2413856%22%20%5Ct%20%22https%3A//scholar.google.com.hk/_blank). Climate Policy, 2024.

Dai-Wei Li, Jun-Ling Huang, Dan Yu, Da Zhang, Xi-Liang Zhang. [Development of low-carbon technologies in China's integrated hydrogen supply and power system](https://www.sciencedirect.com/science/article/pii/S1674927824001126%22%20%5Ct%20%22https%3A//scholar.google.com.hk/_blank). Advances in Climate Change Research, 2024,15(5): 936-947.

Shan Niu, Minghao Qiu, Li Li, Chenfei Qu, Da Zhang. [Climate Actions, Persistent Pollutants, and Human Health: A Call for Integrated Assessments](https://pubs.acs.org/doi/full/10.1021/acs.est.4c07707%22%20%5Ct%20%22https%3A//scholar.google.com.hk/_blank). Environmental Science & Technology, 2024, 58(36):15885-15887.

Yu Lei, Zhicong Yin, Xi Lu, Qiang Zhang, Jicheng Gong, Bofeng Cai, Cilan Cai, Qimin Chai, Huopo Chen, Renjie Chen, Shi Chen, Wenhui Chen, Jing Cheng, Xiyuan Chi, Hancheng Dai, Xiangzhao Feng, Guannan Geng, Jianlin Hu, Shan Hu, Cunrui Huang, Tiantian Li, Wei Li, Xiaomei Li, Jun Liu, Xin Liu, Zhu Liu, Jinghui Ma, Yue Qin, Dan Tong, Xuhui Wang, Xuying Wang, Rui Wu, Qingyang Xiao, Yang Xie, Xiaolong Xu, Tao Xue, Haipeng Yu, Da Zhang, Ning Zhang, Shaohui Zhang, Shaojun Zhang, Xian Zhang, Xin Zhang, Zengkai Zhang, Bo Zheng, Yixuan Zheng, Jian Zhou, Tong Zhu, Jinnan Wang, Kebin He. [The 2022 report of synergetic roadmap on carbon neutrality and clean air for China: Accelerating transition in key sectors](https://www.sciencedirect.com/science/article/pii/S266649842300100X%22%20%5Ct%20%22https%3A//scholar.google.com.hk/_blank). Environmental Science and Ecotechnology, 2024, 19:100335.

Da Zhang, Ziheng Zhu, Shi Chen, Chongyu Zhang, Xi Lu, Xiliang Zhang, Xiaoye Zhang, Michael R Davidson. [Spatially resolved land and grid model of carbon neutrality in China](https://www.pnas.org/doi/abs/10.1073/pnas.2306517121%22%20%5Ct%20%22https%3A//scholar.google.com.hk/_blank). Proceedings of the National Academy of Sciences, 121(10): e2306517121.

Hongyu Zhang, Da Zhang, Siyue Guo, Xiliang Zhang. [Impact of benchmark tightening design under output-based ETS on China's power sector](https://www.sciencedirect.com/science/article/pii/S0360544223032267%22%20%5Ct%20%22https%3A//scholar.google.com.hk/_blank). Energy, 2024, 288:129832.

Heng Liang, Hongyu Zhang, Xiliang Zhang, Junling Huang, Da Zhang. [Role of demand response in the decarbonisation of China's power system](https://www.sciencedirect.com/science/article/pii/S0195925523002792%22%20%5Ct%20%22https%3A//scholar.google.com.hk/_blank). Environmental Impact Assessment Review, 2024, 104:107313.

Da Zhang, Xiao-Dan Huang, Jun-Ting Zhong, Li-Feng Guo, Si-Yue Guo, De-Ying Wang, Chang-Hong Miao, Xi-Liang Zhang, Xiao-Ye Zhang. [A representative CO2 emissions pathway for China toward carbon neutrality under the Paris Agreement's 2° C target](https://www.sciencedirect.com/science/article/pii/S1674927823001417%22%20%5Ct%20%22https%3A//scholar.google.com.hk/_blank). Advances in Climate Change Research, 14(6): 2023,941-951

Runxin Yu, Da Zhang, Xiliang Zhang, Xiaodan Huang. [Machine learning for data verification in emissions trading system](https://www.sciencedirect.com/science/article/pii/S0921344923003737%22%20%5Ct%20%22https%3A//scholar.google.com.hk/_blank). Resources, Conservation and Recycling, 2023, 199:107239.

Qiang Zhang, Zhicong Yin, Xi Lu, Jicheng Gong, Yu Lei, Bofeng Cai, Cilan Cai, Qimin Chai, Huopo Chen, Hancheng Dai, Zhanfeng Dong, Guannan Geng, Dabo Guan, Jianlin Hu, Cunrui Huang, Jianing Kang, Tiantian Li, Wei Li, Yongsheng Lin, Jun Liu, Xin Liu, Zhu Liu, Jinghui Ma, Guofeng Shen, Dan Tong, Xuhui Wang, Xuying Wang, Zhili Wang, Yang Xie, Honglei Xu, Tao Xue, Bing Zhang, Da Zhang, Shaohui Zhang, Shaojun Zhang, Xian Zhang, Bo Zheng, Yixuan Zheng, Tong Zhu, Jinnan Wang, Kebin He. [Synergetic roadmap of carbon neutrality and clean air for China](https://www.sciencedirect.com/science/article/pii/S2666498423000455%22%20%5Ct%20%22https%3A//scholar.google.com.hk/_blank). Environmental Science and Ecotechnology, 2023, 16:100280.

Valerie J Karplus, Da Zhang. [Tensions between local interests and broader gains](https://www.nature.com/articles/s41560-023-01297-6%22%20%5Ct%20%22https%3A//scholar.google.com.hk/_blank). Nature Energy,2023, 8(7):651-652.

Zhang, Da, Qingyi Wang, Shaojie Song, Simiao Chen, Mingwei Li, Lu Shen, Siqi Zheng, Bofeng Cai\*, Shenhao Wang, Haotian Zheng\*. Machine learning approaches reveal highly heterogeneous air quality co-benefits of the energy transition. iScience, 2023, 26(9):107652.

Siyue Guo, Yu Liu, Weichen Zhao, Jiaquan Li, Guangwen Hu, Hui Kong, Yifan Gu, Bang Xu, Xiaodan Huang, Yan Zheng, Shihan Zhang, Da Zhang, Lancui Liu, Xueting Peng, Yi-Ming Wei\*, Xiliang Zhang\*, Zuoren Nie\*. Technological development pathway for carbon neutrality in China. Science Bulletin, 2023,68(02),117-120.

Zhang, Da, Hantang Peng, Lin Zhang\*. Share of polluting input as a sufficient statistic for burden sharing. Energy Economics, 2023, 121: 106647.

Zhang, Hongyu, Da Zhang\*, Xiliang Zhang. The role of output-based emission trading system in the decarbonization of China’s power sector. Renewable and Sustainable Energy Reviews, 2023, 173: 113080.

Zhao, Mengzhen#, Xiaodan Huang#, Tord Kjellstrom, Jason Kai Wei Lee, Matthias Otto, Xiliang Zhang, Marina Romanello, Da Zhang\*, Wenjia Cai\*. Labour productivity and economic impacts of carbon mitigation: a modelling study and benefit-cost analysis. The Lancet Planetary Health, 2022, 6(12): e941-e948.

Li, Chenxing#, Yang Yu#, Andrew Chi-Chih Yao\*, Da Zhang\*, Xiliang Zhang\*. An authenticated and secure accounting system for international emissions trading. Climate Policy, 2022, 22: 9-10, 1333-1342.

Qin, Shize#, Sheng Nie#, Yusheng Guan, Da Zhang\*, Cheng Wang\*, Xiliang Zhang. Forest emissions reduction assessment using airborne LiDAR for biomass estimation. Resources, Conservation & Recycling, 2022, 181, 106224.

Xinhao Wang, Lulin Xu, Qin Zhang, Da Zhang\*, Xiliang Zhang. Evaluating the data quality of continuous emissions monitoring systems in China. Journal of Environmental Management, 2022, 314, 115081.

Davidson, Michael#, Valerie J. Karplus#, Da Zhang#, Xiliang Zhang#. Policies and institutions to support carbon neutrality in China by 2060. Economics of Energy & Environmental Policy, 2021, 10(2): 7–24.

Zhao, Bin#, Jing Zhao#, Hao Zha, Ruolan Hu, Yalu Liu, Chengrui Liang, Hongrong Shi, Simiao Chen, Yue Guo, Da Zhang,\* Kristin Aunan, Shaojun Zhang, Xiliang Zhang, Lan Xue, and Shuxiao Wang\*. Health Benefits and Costs of Clean Heating Renovation: An Integrated Assessment in a Major Chinese City. Environmental Science and Technology, 2021, 55, 14, 10046–10055.

He, Guannan, Jeremy Michalek, Qixin Chen, Soummya Kar, Da Zhang\*, Jay Whitacre\*. Utility-scale portable energy storage systems. Joule, 2021, 5(2): 379–392.

Zhang, Da\*, Jun Gao, Ding Tang, Xiaomeng Wu, Junye Shi, Jiangping Chen, Yinghong Peng, Shaojun Zhang\*, Ye Wu. Switching on auxiliary devices in vehicular fuel efficiency tests can help cut CO2 emissions by millions of tons. One Earth, 2021, 4: 135–145.

Karplus, Valerie J., Thomas Geissmann, Da Zhang. Institutional complexity, management practices, and firm productivity. World Development, 2021, 142: 105386.

Qu, Chenfei, Xi Yang, Da Zhang\*, Xiliang Zhang\*. Estimating health co-benefits of climate policies in China: An application of the regional emissions-air quality-climate-health (REACH) framework. Climate Change Economics, 2020, 11(3): 2041004.

Zhang, Xiliang\*, Andreas Löschel\*, Joanna Lewis\*, Da Zhang\*, Jinyue Yan\*. Emissions trading systems for global low carbon energy and economic transformation. Applied Energy, 2020, 279: 115858.

Guo, Hongye, Michael R. Davidson, Qixin Chen\*, Da Zhang\*, Nan Jiang, Qing Xia, Chongqing Kang, Xiliang Zhang. Power Market Reform in China: Motivations, Progress, and Recommendations. Energy Policy, 2020, 145: 111717.

Karplus, Valerie J., Xingyao Shen, Da Zhang\*. Herding cats: Firm non-compliance in China’s industrial energy efficiency program. The Energy Journal, 2020, 41(4): 3531.

Filippini, Massimo, Thomas Geissmann, Valerie J. Karplus, Da Zhang. The productivity impacts of energy efficiency programs in developing countries: Evidence from iron and steel firms in China. China Economic Review, 2020, 59: 101364.

Zhang, Da, Qin Zhang, Shaozhou Qi, Jinpeng Huang, Valerie J. Karplus\*, Xiliang Zhang\*. Integrity of firms’ emissions reporting in China’s early carbon markets. Nature Climate Change 2019, 9: 164-169.

Zhang, Da\*, Justin Caron, Niven Winchester. Sectoral aggregation bias in the accounting of emissions embodied in trade and consumption. Journal of Industrial Ecology 2019, 23(2): 402-411.

Rausch, Sebastian, Da Zhang\*. Capturing natural resource heterogeneity in top-down energy-economic equilibrium models. Energy Economics 2018, 74: 917-926.

Li, Mingwei#, Da Zhang# (co-first author), Chiao-Ting Li, Kathleen M. Mulvaney, Noelle E. Selin, Valerie J. Karplus. Air quality co-benefits of carbon pricing in China. Nature Climate Change 2018, 8: 398–403.

Davidson, Michael R. #, Da Zhang# (co-first author), Weiming Xiong, Xiliang Zhang\*, Valerie J. Karplus\*. Modelling the potential for wind energy integration on China’s coal-heavy electricity grid. Nature Energy 2016, 1: 16086 (Nature Energy Editors’ picks from 2016 ).

Zhang, Da, Marco Springmann, Valerie J. Karplus. Equity and emissions trading in China. Climatic Change 2016, 134: 131-146.

Karplus, Valerie J., Sebastian Rausch, Da Zhang\*. Energy caps: Alternative climate policy instruments for China? Energy Economics 2016, 56: 422–431.

Springmann, Marco, Da Zhang, Valerie J. Karplus. Consumption-Based Adjustment of China’s Emissions-Intensity Targets: An Analysis of its Potential Economic Effects. Environmental and Resource Economics 2015, 61: 615–640.

Zhang, Da, Valerie J. Karplus, Cyril Cassisa, Xiliang Zhang. Emissions Trading in China: Progress and Prospects. Energy Policy 2014, 75: 9–16.

Zhang, Da, Sebastian Rausch, Valerie J. Karplus, Xiliang Zhang. Quantifying regional economic impacts of CO2 intensity targets in China. Energy Economics 2013, 40: 687-701.

曲洋;胡珮琪;周颖;刘大卫;张达.[英国可再生能源义务转向差价合约制度分析及启示](https://kns.cnki.net/kcms2/article/abstract?v=R2bxtEM5djCkNH4GjA7jjAvt2icL2-Oe6ITsPi9W437DFqMhp2Ccma3Oh65bi35oTHfCdztB0Jk-ftTJ0LvmCaYcxWS_Ew8Uje47cNq1qtBmOn8WpyWDvSnw_DP3rKkLDb5Obd-JillCRWTHVKuPPSpSt-qnq5ow&uniplatform=NZKPT&language=CHS" \o "英国可再生能源义务转向差价合约制度分析及启示" \t "https://kns.cnki.net/kcms2/author/_blank). [中国能源](https://navi.cnki.net/knavi/journals/ZGLN/detail?uniplatform=NZKPT" \o "中国能源" \t "https://kns.cnki.net/kcms2/author/_blank),[2024, 46(11)](https://navi.cnki.net/knavi/journals/ZGLN/issues/R2bxtEM5djCkNH4GjA7jjIzMOgjI9Fn5d4t5qBDhflRdJypF5-jGxGIPQJQG891v?uniplatform=NZKPT" \o "2024(11)" \t "https://kns.cnki.net/kcms2/author/_blank): 88-97.

安瑶;张达;朱开伟;翁玉艳;陈奕名;杨波.[森林碳汇发展的实践、挑战与展望](https://kns.cnki.net/kcms2/article/abstract?v=R2bxtEM5djCkNH4GjA7jjAvt2icL2-Oe6ITsPi9W436n5JHHLDjcjfUdlOxHwGgMZuoPciwe3EAsplzlTn2VR662GxZw4F8uA7w2ieXfpXhJkkCsj5uLm90VCpe-WEYVu3FBhhe6VAqBjdP0zBfnISm-LzzlzS7c&uniplatform=NZKPT&language=CHS" \o "森林碳汇发展的实践、挑战与展望" \t "https://kns.cnki.net/kcms2/author/_blank). 生态经济. 2024, 40 (10): 13-19.

梁珩;黄耕;侯宾;杨玺;罗小虎;张达.[工业用户连续参与需求响应的用户基线负荷精准计算方法](https://kns.cnki.net/kcms2/article/abstract?v=R2bxtEM5djAQ9dW1Pweydg65mBukH11PcaTyu_xNuNRjSdvNFcnnOisuSGp6IexwY5zmvYHb7dzS0-Y7NsKs4LVcFByRcEkVRGSXKObqQJU55PxFk5-xfuV2Pxs-T9ky1nXgO0cm3STN-v_pgH7sCRw8hT06jILt&uniplatform=NZKPT&language=CHS" \o "工业用户连续参与需求响应的用户基线负荷精准计算方法" \t "https://kns.cnki.net/kcms2/author/_blank). 中国电力 . 2024 ,57 (03): 34-42.

朱子恒;张策;丁肇豪;张达.[数据中心纳入全国碳排放权交易市场机制研究](https://kns.cnki.net/kcms2/article/abstract?v=R2bxtEM5djA7Iib3ry6qaWvZ4jcaqMIkgNZnTpAgifRUyvmbzzcQAjdIRN5-r8Fy6lbQvckjgpNmW6GK92_FT5pYp1NbUkgnYaWphxzueP-Yf_A5531Z4baMQ6_Z-NSi3UA6VskRnkTkm4nga4IKi5DyT391Hdkl&uniplatform=NZKPT&language=CHS" \o "数据中心纳入全国碳排放权交易市场机制研究" \t "https://kns.cnki.net/kcms2/author/_blank). [中国电机工程学报](https://navi.cnki.net/knavi/journals/ZGDC/detail?uniplatform=NZKPT" \o "中国电机工程学报" \t "https://kns.cnki.net/kcms2/author/_blank),[2024, 44(14)](https://navi.cnki.net/knavi/journals/ZGDC/issues/R2bxtEM5djAQ9dW1Pweydif4A38ta4BSrfm31fOM8uaiHfMZKaEBtRERRa8c1njM?uniplatform=NZKPT" \o "2024(14)" \t "https://kns.cnki.net/kcms2/author/_blank): 5562-5574.

王新宇;卢韦伟;石睿杰;陈启鑫;张达;杜尔顺;黄俊灵.[三峡集团乌兰察布“源网荷储一体化”示范项目设计](https://kns.cnki.net/kcms2/article/abstract?v=R2bxtEM5djA7Iib3ry6qaWvZ4jcaqMIkgNZnTpAgifQ5ljixrymhpHxeeTjUN5SZPMBmT1cHduUYJpmO6CJo7CNnbH2BVmnYvS6ADpOWbCzXS8wCR2mKN36D3_mU9CRmapvZV4N6MJ20VqWVUW5Dupp4J5DkUiVZ&uniplatform=NZKPT&language=CHS" \o "三峡集团乌兰察布\“源网荷储一体化\”示范项目设计" \t "https://kns.cnki.net/kcms2/author/_blank). [电力需求侧管理](https://navi.cnki.net/knavi/journals/DLXQ/detail?uniplatform=NZKPT" \o "电力需求侧管理" \t "https://kns.cnki.net/kcms2/author/_blank),[2023, 25(04)](https://navi.cnki.net/knavi/journals/DLXQ/issues/R2bxtEM5djA7Iib3ry6qaY-A_bIiWxVsv9aoaJTVMKxt0VUvzcVZH4jHHKHyQ9nc?uniplatform=NZKPT" \o "2023(04)" \t "https://kns.cnki.net/kcms2/author/_blank): 41-47.

王心昊,蒋艺璇,陈启鑫,姜楠,张达.可交易减排价值权证比较分析和衔接机制研究. 电网技术. 2023,47(02): 594-603.

张达,李彬.应对气候变化与军备控制的关联研究. 世界知识. 2022(03): 72-73.

张希良,黄晓丹,张达,耿涌,田立新,范英,陈文颖.碳中和目标下的能源经济转型路径与政策研究. 管理世界. 2022,38(01): 35-66.

张钦,张达,张希良. 在线监测应用于中国碳排放监测的相关问题和制度建议. 环境经济研究. 2021,6(03): 136-146.

张鸿宇,黄晓丹,张达,张希良. 加速能源转型的经济社会效益评估. 中国科学院院刊. 2021(09): 1039-1048.

张希良,张达,余润心. 中国特色全国碳市场设计理论与实践. 管理世界. 2021(08): 80-95.

谷宇辰,张达,张希良. 关于完善能源消费“双控” 制度的思考与建议—基于“十三五”能源消费变化的研究.中国能源. 2020,42(09): 4-9.

****主要项目：****

•推进绿色电力交易、多年期购电协议和清洁热力采购,苹果采购运营管理（上海）有限公司, 2025-05至2025-12，68万元，主持

•[可再生能源评估与新型电力系统建模分析（四期）](https://kyxxglxt.tsinghua.edu.cn/business/vprojectAction%21to_view.action?entity.id=26ef84ce971f2b6501972031871219ed&isPersonalCenter=false&ck=G9ITHL8V33LP28HDIB8SQIXJCFQSII7I&ck=G9ITHL8V33LP28HDIB8SQIXJCFQSII7I" \o "项目查看" \t "https://kyxxglxt.tsinghua.edu.cn/business/_blank)，清华大学科研院，2025-04至2026-04，15万元，主持

•[中国电力行业改革的系统映射](https://kyxxglxt.tsinghua.edu.cn/business/vprojectAction%21to_view.action?entity.id=26ef84cd92c2bb2c0192f59d820a15d3&isPersonalCenter=false&ck=G9ITHL8V33LP28HDIB8SQIXJCFQSII7I&ck=G9ITHL8V33LP28HDIB8SQIXJCFQSII7I" \o "项目查看" \t "https://kyxxglxt.tsinghua.edu.cn/business/_blank)，伦敦大学学院，2024-12至2025-07，7万英镑，主持

•新能源发电设备回收循环利用研究，水电水利规划设计总院，2024-11至2025-06，82.8万元，主持

•碳电市场改革发展趋势及集团参与策略研究，中国广核电力股份有限公司， 2024-11至2025-06，79.8万元，主持

•可再生能源市场机制理论、政策与实践，清华大学科研院，2024-09 至 2025-09，20万元，主持

•支持未来中国可再生能源发展的立法与更广范围降碳研究，美国环保协会北京代表处，2024-12至2025-12，45万元，主持

•[可再生能源评估与新型电力系统建模分析（三期）](https://kyxxglxt.tsinghua.edu.cn/business/vprojectAction%21to_view.action?entity.id=26ef84ce971f2b6501972031871219ed&isPersonalCenter=false&ck=G9ITHL8V33LP28HDIB8SQIXJCFQSII7I&ck=G9ITHL8V33LP28HDIB8SQIXJCFQSII7I" \o "项目查看" \t "https://kyxxglxt.tsinghua.edu.cn/business/_blank)，清华大学科研院，2024-05至2025-04，15万元，主持

•全国碳排放权交易市场有偿分配研究，生态环境部经清华大学国家治理与全球治理研究院委托，2024-04至2024-12，10万元，主持

•碳排放连续在线监测在全国碳市场（发电行业）的应用条件评估与案例研究，美国环保协会北京代表处，2023-10至2024-12，49万元，主持

•拓展全球企业供应链可再生清洁电力项目，卡内基梅隆大学，2024-03至2024-10，7.5万美元，主持

•绿电、绿证、碳市场协同支持可再生能源发展机制研究，清华大学科研院，2023-09至2024-09，30万元，主持

•,碳普惠机理与减排额外性实证研究，北京交研都市交通科技有限公司，2023-07至2024-06，50万元，主持

•,城市园区绿色能源发展转型评估研究，水电水利规划设计总院，2023-10至2023-12，47万元，主持

•,新能源平价项目绿电绿证交易和碳资产交易增收创效路径研究，国华能源有限公司，2023-09至2024-06，42万元，主持

•,可再生能源评估与新型电力系统建模分析，清华大学科研院，2023-10至2024-03，12.87万元，主持

•,清华大学-腾讯 “碳市场：基于技术解决方案的测量、报告与核证（MRV）”产学研深度融合专项计划，腾讯臻益（北京）企业发展有限公司，2024-04至2027-08，1800万元，主持子课题

•面向我国碳中和最优路径实现的自然-社会系统多尺度相互作用模式耦合、数据监测支持和决策支撑研究的顶层设计，国家自然科学基金委员会，2023-01至2025-12，2000万元，主持子课题

•碳达峰碳中和路径与对策综合研究，国家自然科学基金委员会，2022-01至2025-12，300万元，主持子课题

•我国中长期风能与太阳能发电协同发展的布局优化和激励机制研究，国家自然科学基金委员会， 2020-01至2023-12，49.5万元，主持

•中欧电力行业深度脱碳：市场和政策机制设计，国家自然科学基金委员会中德科学中心，2022-11至2025-10，62.96万元，主持

•支持“双碳”发展的财税政策研究，财政部经清华大学国家治理与全球治理研究院委托，2023-07至2023-10，10万元，主持

•清华大学-中国长江三峡集团有限公司气候变化治理机制与绿色低碳转型战略联合研究中心，中国长江三峡集团有限公司，2021-08至2026-08，3000万元，主持子课题

•海外高层次人才青年项目，中组部，2021-01至2023-12，200万元，主持

•基于多源异构数据融合共享的城市能源电力碳排放监测、诊断关键技术研究，国网浙江省电力有限公司信息通信分公司，2022-04至2023-12，160万元，主持

•双碳目标下“电-碳”市场协同及绿色电力认证关键技术研究，国网北京市电力公司，2022-05至2023-12，80万元，主持

•全国碳市场碳价影响因素分析与拍卖机制研究，美国环保协会，2022-09至2023-09，45万元，主持

•双碳目标下能源保供前瞻性研究，财政部经建司经水电水利规划设计总院委托，2022-10至2022-12，47万元，主持

•电网企业推动碳金融市场建设和碳排放计量相关问题研究，南方电网能源发展研究院，2021-11至2022-12，177.5万元，主持

•电网企业碳资产发展战略研究，国网山东省电力公司经济技术研究院，2022-07至2022-12，139.8万元，主持

•雄安绿色交易及电碳市场协同发展机制研究，国网河北省电力有限公司，2022-05至2022-12，93万元，主持

•全国碳市场的拍卖机制设计研究，美国环保协会，2021-09至2022-09，49.5万元，主持

•基于区块链技术的源网柔性互动数据管理应用开发，国网山东电力青岛供电公司，2022-03至2022-08，98.1万元，主持

•国有企业绿色低碳发展研究，国资委社会责任局经清华大学国家治理与全球治理研究院委托，2022-04至2022-06，10万元，主持

•碳达峰目标对经济结构调整的影响研究，国家发展和改革委员会发展战略和规划司，2021-09至2021-12，10万元，主持

•财政支持构建以新能源为主体的新型电力系统的关键问题研究，财政部经建司经水电水利规划设计总院委托，2021-11至2021-12，22万元，主持

•民用采暖清洁化过程的经济可持续性研究，生态环境部大气环境司经清华大学国家治理与全球治理研究院委托，2021-05至2021-12，10万元，主持

•参与碳市场的企业排放数据质量分析与预警系统，美国环保协会，2020-09至2021-09，49.5万元，主持

•中国碳定价政策对于能源和二氧化碳排放影响的区域分析，经济合作与发展组织（OECD）/国际能源署（IEA），2019-07至2023-06，13.12万欧元，主持

•中国可再生能源主导的能源革命综合经济社会效益评价研究，国家能源局新能源司经世界银行委托， 2019-09至2020-12，150万元，主持

•支撑能源安全的石油真实国内需求研究，国家发展和改革委员会发展战略和规划司，2020-05至2020-08，10万元，主持

•“十四五”时期能源消费预测和控制目标研究，国家发展和改革委员会发展战略和规划司，2019-11至2019-12，10万元，主持