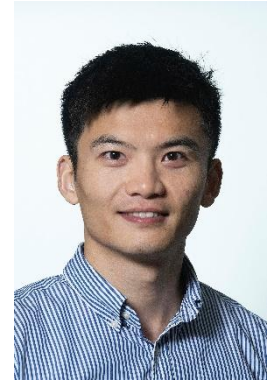


Quanliang Ye - Curriculum Vitae

PERSONAL AND CONTACT DETAILS

Name: Quanliang YE
Gener: Male (he/him)
Nationality: Chinese
Date of Birth: April 1993
Phone: +43-67763696035
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Google Sch.: <https://scholar.google.com/citations?user=WNgSJnsAAAAJ&hl=en>
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Personal Web: https://yequanliang1993.github.io/site_quanliang_ye



EDUCATION

- 09/2018 – 08/2022** *Doctor of Philosophy* in Industrial Ecology — University of Twente (Netherlands)
Thesis: “Enhanced input-output modelling for improved assessment of supply chain-wide environmental pressures in space and time: the case of China”
Supervisors: Arjen Hoekstra, Markus Berger, Maarten Krol
- 10/2021 – 01/2022** *Research Visitor* — University of Groningen (Netherlands)
Project: China’s future capital development and associated dynamic impacts on China’s carbon emissions
Supervisors: Klaus Hubacek, Yuli Shan
- 09/2015 – 06/2018** *Master of Science* in Environmental Science — Hohai University (China)
Thesis: “Optimal allocation of water resources integrated with water footprint and virtual water trade in water scarce regions”
Supervisors: Yi Li, Wenlong Zhang
- 09/2011 – 06/2015** *Bachelor of Engineering* in Applied Mathematics — Hohai University (China).
Thesis: “A Mathematical Model of Radiation Hydrodynamics”
Supervisors: Chunjin Lin

ACADEMIC PROFESSIONAL APPOINTMENTS

- 02/2025 – Present** **Research Scholar**, Energy Climate and Environment (ECE) Program
International Institute for Applied Systems Analysis (IIASA), Austria
Unpack and quantify the potential importance of including heterogeneous human behaviour in integrated assessment models (IAMs)
- 03/2023 – Present** **Guest Lecturer**, College of Environment
Hohai University, China
Guest lectures in Advanced Environmental Science (Master Course)

- 10/2023 – 01/2025** **Postdoctoral Researcher**, Business Administration, Nijmegen School of Management
Radboud University, The Netherlands
Downscaling / regionalizing system dynamics-based integrated assessment models (IAMs)
- 05/2022 – 06/2025** **Postdoctoral Researcher**, Danish Center of Environmental Assessment (DECA)
Aalborg University, Denmark
Data collection for resources, products, and industries in space and time; constructing physical supply and use tables for sustainable assessments

GRANTS AND AWARDS

GRANTS

- 2023 – 2026** European Union's Horizon 2.5 – Climate Energy and Mobility: CHOICE – Innovative integrated assessment models for the food sector. **Contributor**, total budget EUR 4.9 million
- 2022 – 2026** European Union's Horizon 2.5 – Climate Energy and Mobility: WorldTrans – Transparent Assessments for Real People. **Contributor**, total budget EUR 4.6 million
- 2021 – 2025** KR Foundation of Denmark: The Getting the Data Right project. **Contributor**, total budget DKK 65 million
- 2018 – 2022** China Scholarship Council (CSC): Enhanced Input-Output Modelling for Improved Assessment of Supply Chain-Wide Environmental Pressures in Space and Time. **PI**, total budget EUR 64800

AWARDS

- 2024** Best Presenter Award, The 8th Dalian University of Technology International Young Scholars Forum
- 2023** The 17th Philosophy and Social Science Outstanding Achievement Awards, Second award
- 2021** China Chamber of Commerce Science and Technology Award, Third award
- 2018 – 2022** China Scholarship Council (CSC), No. 201806710143
- 2018** Best Master Thesis of Hohai University
- 2017** National Scholarship for Graduated Students, 20,000 CNY
- 2015, 2016, 2017** First Class Scholarship, Rank 1/65, Hohai University, 12,000 CNY
- 2013** Mathematical Contest in Modeling, Third Prize

TEACHING & MENTORING EXPERIENCES

- 02/2025 – Present** **Mentor**, International Institute for Applied Systems Analysis (IIASA)
- Poornima Kumar, YSSP 2025, University of Oxford (UK)
 - Dr. Ling Zhang, Graduated in June 2026, YSSP 2024 / Guest Visitor, Peking University (China)
- 01/2024 – 01/2025** **Instructor**, Nijmegen School of Management, Radboud University
- Qualitative Research Methods (Undergraduate / Pre-master Course)
 - Project Responsible Organisation 2: Business Analysis for Responsible Organisation (Undergraduate Course)

05/2022 – 09/2023	Mentor , Department of Planning, Aalborg University • Dr. Yue Xiao, Graduated in December 2023, Vienna University of Economics and Business (Austria) • Dr. Dongxiao Xu, Graduated in May 2024, Beijing Normal University (China) • M.Sc. Xinzi Wang, Graduated in June 2024, Hohai University (China)
10/2022 – 11/2022	Guest Lecture , Department of Planning, Aalborg University • Introduction of Sustainable Development and Environmental Management
01/2020 – 09/2020	Mentor , MWM Group, University of Twente • M.Sc. Yi Zhang, Graduated in June 2022, Hohai University (China)
09/2019 – 01/2020	Teaching Assistant , MWM Group, University of Twente • Water and Energy (Master Course)
1/2019 – 11/2019	Guest Lecture , MWM Group, University of Twente • Input-Output Modelling: From Theory to Practices
11/2016 – 06/2017	Mentor , College of Environment, Hohai University, China • Yan Cui, Bachelor Thesis

RESEARCH OUTPUT

Summary (Google Scholar): h-index (16), total citations (905)

Peer-reviewed publications in scientific journals, as first author / first corresponding author:

- Zhang, L.[†], **Ye, Q.**^{†,*}, Kharrazi, A., Huang, Q., Wu, J., Fath, B. D. (2026) A three-decade-long analysis shows rising threatened species and responsibility gaps in global supply chains. *Proceedings of the National Academy of Sciences of the United States of America* 123 (37) e2604868123 ([†] These authors contribute equally)
- Ye, Q.**^{*}, Shan, Y.^{*}, and Hubacek, K.^{*}. (2024) Promoting inter-generational equity calls strong sustainability and strategic investments in long-lasting capital systems. *Cell Reports Sustainability* 1 (9), 100153 (**Open Access**)
- Ye, Q.**, Liu, Q., Swamy, D., Gao, L., Moallemi, E. A., Rydzak, F., Eker, S.^{*} (2024) FeliX 2.0: An integrated model of climate, economy, environment, and society interactions. *Environmental Modelling & Software*, 106121 (**Open Access**)
- Ye, Q.**, Krol, M.S., Shan, Y.^{*}, Berger, M., and Hubacek, K.^{*} (2023) Allocating capital-associated CO2 emissions along full lifespan of capital investments helps re-assessing emission responsibilities. *Nature Communications* 14, 2727 (**43 citations, Open Access, IF 18.1**)
- Ye, Q.**^{*}, Bruckner, M., Wang, R., Schyns, J.F., Zhuo, L., Yang, L., Su, H. and Krol, M.S. (2022) A hybrid multi-regional input-output model of China: Integrating the physical agricultural biomass and food system into the monetary supply chain. *Resources, Conservation and Recycling* 177 (**69 citations, Open Access, IF 10.4**)
- Ye, Q.**^{*}, Wang, R., Schyns, J.F., Zhuo, L., Yang, L. and Krol, M.S. (2022) Effects of production fragmentation and inter-provincial trade on spatial blue water consumption and scarcity patterns in China. *Journal of Cleaner Production* 334 (**Open Access, IF 10.7**)
- Ye, Q.**, Hertwich, E.G., Krol, M.S., Font Vivanco, D., Lounsbury, A.W., Zheng, X., Hoekstra, A.Y., Wang, Y. and Wang, R.^{*} (2021). Linking the Environmental Pressures of China's Capital Development to Global Final Consumption of the Past Decades and into the Future. *Environmental Science & Technology* 55(9), 6421-6429 (**35 citations, Open Access, IF 12.2**)
- Ye, Q.**, Li, Y.^{*}, Zhuo, L., et al. (2018). Optimal allocation of physical water resources integrated with virtual water trade in water scarce regions: A case study for Beijing, China. *Water Research* 129, 264-276 (**175 citations, IF 12.8**)

- Ye, Q.**, Li, Y.*, Zhang, W. and Cai, W. (2019). Influential factors on water footprint: A focus on wheat production and consumption in virtual water import and export regions. *Ecological Indicators* 102, 309-315
- Wu, Z., Zhao, M., and **Ye, Q.*** (2023) The influence of technology improvements and the consistency of environmental and economic indicators on decoupling of greenhouse gas emissions and economic growth. *Sustainable Production and Consumption* 42, 14-22 (**Open Access, IF 9.2**)
- Wu, Z., Wang, M. and **Ye, Q.*** (2021) Integrating the inter- and intra-annual dynamic features of capital into environmental footprint assessment: Revisiting China's greenhouse gas footprints, 1995-2015. *Science of the Total Environment* 801, 149629 (**Open Access**)
- Wu, Z., Yang, L., Chen, Q. and **Ye, Q.*** (2021) The impacts of international trade on global greenhouse gas emissions: A thought experiment based on a novel no-trade analysis. *Journal of Environmental Management* 300 (**ABS 3, Open Access, IF 9.2**)
- Wu, Z. and **Ye, Q.*** (2020). Water pollution loads and shifting within China's inter-province trade. *Journal of Cleaner Production* 259 (**50 citations, Open Access, IF 10.7**)
- Wu, Z., **Ye, Q.*** and Tian, Z. (2020). Effects of the Policy and Human Intervention on the Infrastructure-Environment Nexus in China. *Sustainability* 12(18) (**Open Access**)
- Li, Y., Huang, Y., **Ye, Q.***, Zhang, W., et al. (2018). Multi-objective optimization integrated with life cycle assessment for rainwater harvesting systems. *Journal of Hydrology* 558, 659-666 (**56 citations**)

Peer-reviewed publications in scientific journals, as co-author:

- Xu, D., Zhang, Y.*, **Ye, Q.**, Shan, Y., Li, J. (2026). Over two-thirds of the historical carbon emissions embodied in legacy capital contribute to China's growing consumption-based emissions responsibility. *Environmental Impact Assessment Review* 118, 108268
- Yu, L., Wu, X., Sang, S., Li, Y., Li, C., **Ye, Q.**, Varis, O., Fu, B., Wang, S. (2026). Yellow River Basin water stress has eased but may persist without enhanced efficiency and sustainable agriculture. *Communications Sustainability* 1(1), 9
- Yu, L., Wang, S., Song, S., **Ye, Q.**, Wu, X., Fu, B. (2026). ISEHSD: a feedback-based, integrated social-ecohydrological system dynamic model for studying river basin-level transformation. *Environmental Modelling & Software* 204, 107103
- Sun, Z., Zhan, Y., Liu, L., **Ye, Q.**, Zhang, Q.*. (2024). China's dietary transition and its impact on cropland demand for sustainable agriculture. *Sustainable Production and Consumption* 49, 61–71
- Wang, X., Zhang, W.*, Li, Y., Tong, J., Yu, F., **Ye, Q.*** (2024). Impacts of water constraints on economic outputs and trade: A multi-regional input-output analysis in China. *Journal of Cleaner Production* 434, 140345
- Xu, D., Zhang, Y.*, **Ye, Q.**, Fang, Z., Li, Y., Qang, X., Yang, Z. (2023) Mapping CO₂ spatiotemporal transfers embodied in China's trade using a global dynamic network model endogenizing fixed capital. *Journal of Cleaner Production* 427, 139162
- Yuguda, K.T., Li, Y.*, Zhang, W., **Ye, Q.** (2020) Incorporating water loss from water storage and conveyance into blue water footprint of irrigated sugarcane: A case study of Savannah Sugar Irrigation District, Nigeria. *Science of The Total Environment* 715, 136886
- Li, Y., Zhang, S., Zhang, W., Xiong, W., **Ye, Q.**, Hou, X., Wang, C., Wang, P. (2019). Life cycle assessment of advanced wastewater treatment processes: Involving 126 pharmaceuticals and personal care products in life cycle inventory. *Journal of environmental management* 238, 442-450 (**137 citations, ABS 3**)
- Xiong, W., Li, Y., Zhang, W., **Ye, Q.**, Zhang, S., Hou, X. (2018). Integrated multi-objective optimization framework for urban water supply systems under alternative climates and future policy. *Journal of Cleaner Production* 195, 640–650 (**41 citations**)
- Li, Y. *, **Ye, Q.**, Liu, A., Meng, F., Zhang, W., Xiong, W. (2017). Seeking urbanization security and sustainability: Multi-objective optimization of rainwater harvesting systems in China. *Journal of Hydrology* 550, 42–53 (**43 citations**)

ORAL PRESENTATIONS AT SCIENTIFIC CONFERENCES

- Zhang, L., **Ye, Q.**, Huang, Q., Kharrazi, A., Wu, Y., Wu, J., Fath, B.D.: Two-decade-long analysis shows rising biodiversity threats and responsibility gaps in global supply chains. *World Biodiversity Forum 2026*. June 2026, University of Zurich, Davos, Switzerland
- Ye, Q.**: Social dynamics of household consumption in ageing societies. *The 12th International Conference on Industrial Ecology*. July 2025, National University of Singapore, Singapore
- Ye, Q.**, Eker, S.: FeliX 2.0: An integrated model of climate, economy, environment, and society interactions. *The 17th IAMC Annual Meeting 2024*. November 2024, Yonsei University, Seoul, South Korea
- Ye, Q.**: Role of long-lasting capital on environmental and sustainable assessment in space and time. *The 11th International Society for Industrial Ecology conference*. July 2023, Leiden University, Leiden, the Netherlands
- Ye, Q.**: Climate Change: The Physical Science Basis, Impacts, Adaptation and Vulnerability, and Mitigation of Climate Change. College of Environment. May 2023, Hohai University, Nanjing, China (**Invited by the host**)
- Ye, Q.**: From GHG emission gap to SDGs investment gaps: efforts for sustainable development. *Department of Planning*. November 2022, Aalborg University, Aalborg, Denmark
- Ye, Q.**: Water pollution loads, shifting, and key drivers within China's inter-provincial trade. *The 5th International Symposium on Shallow Flows conference*. October 2021, Hohai University, Nanjing, China
- Ye, Q.**: Capital Derived environmental impacts in China. *The 10th International Society for Industrial Ecology conference*. July 2019, Tsinghua University, Beijing, China
- Ye, Q.** and Wang, R.: Trends and patterns in the contributions to water use from different anthropogenic drivers. *The 10th International Society for Industrial Ecology conference*. July 2019, Tsinghua University, Beijing, China
- Ye, Q.** and **Wang, R.**: Multi-Regional Input-Output Benchmark Evaluation of Water Economic Productivity: A Policy Analysis of "Three Red Line" in China. *AEESP 2019 Research and Education Conference at ASU*. May 2019, Arizona State University, Tempe, AZ, the United States
- Ye, Q.**: Optimal allocation of physical water resources integrated with virtual water trade in water scarce regions: A case study for Beijing, China. *China Research Institute of Water-Saving Agriculture in Arid Regions*. August 2018, Yanglin, Shaanxi, China (**Invited by the host**)

ACADEMIC SERVICE & SOCIETY MEMBERSHIP

09/2015 – Present

Collaboration Liaison

- University of Oxford (UK)
- Hohai University (China)
- Leiden University (Netherlands)
- Aalborg University (Denmark)
- Norwegian University of Science and Technology (Norway)
- Vienna University of Economics and Business (Austria)
- International Institute for Applied Systems Analysis (Austria)
- Peking University (China)
- Northwest A&F University (China)
- University of Groningen (Netherlands)
- Radboud University (Netherlands)

03/2016 – Present

Journal Editor and Referee

- Communications Sustainability, Nature Portfolio (**Editorial Board Member**)
- Carbon Footprint (**The Youth Editorial Board member**)
- Frontiers in Environmental Science (**Review Editor** for Freshwater Science)
- Nature Food (1)
- Journal of Cleaner Production (12)
- Journal of Environmental Management (3)
- Water Research (7)
- Environmental Research (6)
- Scientific Data (3)

- The International Society for Industrial Ecology (ISIE)
- The International Input-Output Association (IIOA)

AUTHORIZED PATENTS

- Li, Y., **Ye, Q.**, Zhang, W., Xiong W. and Li, J. Artificial water weed for pollution reduction in rivers. CN201510797105.9. Authorized date 11/07/2017. <http://www.soopat.com/Patent/201510797105?lx=FMSQ> (in Chinese)
- Li, Y., Li, J., Zhang, W. and **Ye, Q.** Ecological floating beds for oil pollution reduction in natural water bodies. CN201510799474.1. Authorized date 16/06/2017. <http://www.soopat.com/Patent/201510799474> (in Chinese)

ALGORITHMS & DATABASES

- Algorithms**
- Full of Economic-Environment Linkages and Integration dX/dt (FeliX) model (*Open Access*)
<https://github.com/iiasa/Felix-Model>
 - Capital-endogenized input-output model
<https://github.com/yequanliang1993/capital-endogenized-input-output-model.git>, including:
A global version based on EXIOBASE V3, (*Open Access*)
A Inter-provincial version for China (*Open Access*)
 - Food and Agricultural Biomass Input-output model for China (*Open Access*)
<https://github.com/yequanliang1993/fabio-chn.git>
 - BONSAI, Big Open Network for Sustainability Assessment Information (*Open Access*)
<https://gitlab.com/bonsamurais/bonsai>
- Databases**
- Time-series physical supply, use, and input-output tables for China between 1990 and 2013, <https://doi.org/10.6084/m9.figshare.16571103.v5> (*Open Access*)
 - Time-series provincial gross fixed capital formation for China between 1990 and 2017, <https://doi.org/10.6084/m9.figshare.20407572.v1> (*Open Access*)

LANGUAGE AND COMPUTER SKILLS

- Languages**
- Chinese (Mother Tongue)
 - English (Good)
 - Dutch (Basic)
- Computer**
- Python (Good), Matlab (Good), SPSS (Good), ArcGIS (Good), Q-GIS (Basic)
 - Microsoft Office™ tools (Good), Photoshop CS (Good)
- Others**
- Badminton (Good), Swimming (Good), Basketball (Good), Archery (Basic)