

QI DING

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EDUCATION

Tsinghua University, Institute of Energy, Environment, and Economy, *Ph.D. in Management Science and Engineering* 2023.09 - 2028.06 (Expected)

- **Research Interests:** Transportation Decarbonization, Vehicle-to-Grid (V2G), Battery Recycling

Tongji University, School of Automotive Studies, *B.Eng. in Vehicle Engineering* 2018.09 - 2023.06

- **Honors Awards:** National Scholarship (×2), Shanghai Outstanding Graduate
- **Language Proficiency:** English (CET-6: 641), German (Band 6: Excellent)

RESEARCH PROJECTS

National Key R&D Program of China: Technology for CO₂-EOR and Long-term Sequestration
Core Member

- Contributed to the techno-economic assessment of CCUS technologies, focusing on the carbon sequestration benefits and cost curves of CO₂-EOR to support the formulation of China's national CCUS technology roadmap.

The World Bank Group: Green China - Towards a Cleaner, More Sustainable Economy
Researcher

- Analyzed the low-carbon transition pathway for the power sector using the **China TIMES 2.0** integrated assessment model, providing techno-economic analysis for the World Bank's policy report on China's green growth.

Carbon Neutrality Technology Roadmap for Commercial Vehicles (National Think Tank Project)
Core Member

- Led the analysis for the clean energy supply section, assessing the prospects and challenges of hydrogen, bio-fuels, and electrification. Findings were incorporated into a key research report for a national high-level think tank.

European Commission (DG CLIMA): COMMITTED Project Core Member

- Engaged in multi-country joint modeling using Integrated Assessment Models (IAMs) to evaluate the impacts of various climate policy portfolios, supporting integrated research on global climate transition pathways.

PUBLICATIONS

- Chen, W., Zhang, S., Zhang, Q., Ren, J., **Ding, Q.** (2025). Assessment of Coordinated Carbon Neutral Transition Pathways for China's Provincial Power Systems. *Energy and Climate Change*, 1(1), 1-15.
 - Utilized the China TIMES-30PE model to reveal deep decarbonization pathways for provincial power systems, highlighting the critical role of inter-regional power transmission and energy storage in a coordinated transition.
- Ding, Q., et al. The Role of Shared Autonomous Electric Vehicles in Decarbonizing China's Passenger Transport Sector. (Submitted to *Applied Energy*, with editor).
 - This work is the first to systematically quantify the cross-sectoral impacts of Shared Autonomous Electric Vehicles (SAEVs), demonstrating their potential to substantially reduce energy consumption and critical mineral demand.

SKILLS

- **Programming Languages:** Python (incl. Numpy, Pandas), MATLAB, GAMS
- **Modeling Tools:** TIMES (Integrated Energy Assessment Model), GIS
- **Data Analysis:** Statistical Analysis, Econometrics, Machine Learning, Scenario Analysis