

Graduate Institute of Sustainability Management and Environmental Education

Transdisciplinary Research on Sustainability

My research interests focus on governance and policy design for sustainable development. In recent years, I have examined national climate policy design, particularly net-zero-aligned national and urban climate policies, land teleconnections, and circular economy.

Techniques used in the study

Computable general equilibrium (CGE) models, economic modeling, multi-scale land teleconnections, and econometric analysis.

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Background:

Ph.D. in Applied Economics and Management
Cornell University, Ithaca, NY, USA

Funding:

National Development Council
National Science & Technology Council

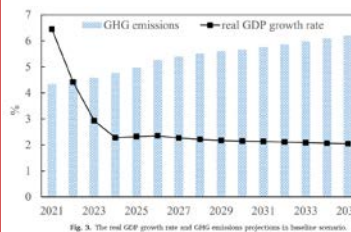


Fig. 3. The real GDP growth rate and GHG emissions projections to baseline scenario.

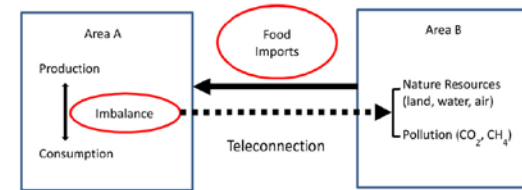


Fig. 1. The idea concerning food (beef)-related ULT in this study.

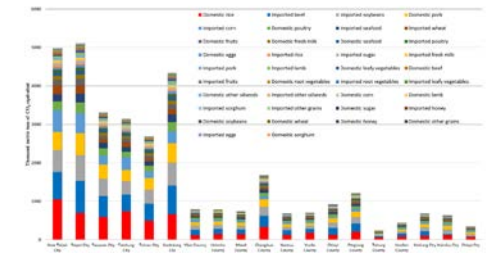


Figure 3. Greenhouse gas emissions embodied in food consumption in each country and city in Taiwan (Unit: Domestic tons of CO₂e). Source: Authors' own work.

Selected publications

- **T.C. Lee***, H.Y. Yen (2025). Quantifying embodied greenhouse gas emissions in food consumption: a multi-spatial scale analysis using Taiwan as a case study. *British Food Journal*. (SCIE)
- **Lee, T. C.**, Lee, Y. C., & Su, J. R. (2025). Can corporate afforestation justify the mitigation of CO₂ emission? Urban land teleconnection approach. *Environmental Research Letters*, 20(7), 074021. (SSCI)
- Wu, Y.H., and **T.C. Lee*** (2024). Designing a cost-effective policy mix for transition toward net-zero emissions: a case study of the mid-term plan by 2035 of Taiwan. *Carbon Management*, 15(1). (SSCI)
- Feng, C.C.,* K.F. Chang, J.X. Lin, **T.C. Lee**, and S.M. Lin (2022), Toward green transition in the post Paris Agreement era: The case of Taiwan. *Energy Policy*, 165, 112996. (SSCI)
- Chung, Y. C.Y., and **T.C. Lee*** (2020). Tele-connecting urban food consumption to land use at multiple spatial scales: a case study of beef in Taiwan. *Ecological Economics*, 169, 106506 (SSCI).

