



The Energy & Strategy Think Tank (ESTT) at WU's Institute for Strategic Management (ISM) (<https://www.wu.ac.at/en/ism/energy-strategy-think-tank/>) invites applications for a master thesis.

Working Title: *Carbon Capture, Utilization, and Storage (CCUS) Hubs: Business Models and Success Factors*

Scope, Aims, Methods, and Initial Literature: Carbon Capture, Utilization, and Storage (CCUS) technologies provide solutions for many hard-to-abate sectors such as aviation, cement, and hydrogen production from fossil fuels in order to reach net zero goals. Due to the high costs of these technologies, cross-industry CCUS hubs have emerged that share CCUS infrastructure and resources across multiple firms with the promise to reduce the risks associated with the upfront investment capital that individual firms may be unable to burden alone (Bang, Moreno, Lund, & Nielsen, 2024; Eva, 2021; Hakovirta, Kovanen, Martikainen, Manninen, & Harlin, 2023; Mckinsey, 2023; Pinkse, Demirel, & Marino, 2024; Wang, 2024). Against this background, this thesis aims to

- identify major CCUS hubs in Europe and systematically compare their business models (Snihur & Markman, 2023)
- identify best practices for operating such hubs

To that end, grey literature should be analyzed (Adams, Smart, & Huff, 2017) and expert interviews with organizations and experts from the industry should be conducted (Bogner, Littig, & Menz, 2009).

Thesis Language: English or German (only if you are enrolled in a program with German as main language)

Corporate Partner and Certificate: Wien Energie – *Austria's biggest regional electricity company*. Upon thesis completion, you will be awarded a certificate that states your tasks, gained expertise, and the corporate partner.

Expectations and Support: Constant feedback and regular meetings with faculty and, possibly, the above-mentioned corporate partner will facilitate a high-quality thesis with impact on management practice that is completed in a timely fashion. You will be provided with a guideline that details the supervision and writing process, expected deliverables beyond the final thesis, and grading as well as a package to kick off your thesis.

Targeted Students: Excellent and ambitious students of all MSc and MBA programs at WU Vienna University of Economics and Business are eligible and encouraged to apply. In principle, it is possible to write the thesis together with another student.

Interested? Send CV and grade certificates of all your studies to patrick.holzmann@wu.ac.at

Initial References:

- Adams, R. J., Smart, P., & Huff, A. S. 2017. Shades of Grey: Guidelines for Working with the Grey Literature in Systematic Reviews for Management and Organizational Studies. *International Journal of Management Reviews*, 19(4): 432-454.
- Bang, A., Moreno, D., Lund, H., & Nielsen, S. 2024. Regional CCUS strategies in the context of a fully decarbonized society. *Journal of Cleaner Production*, 477: 143882.
- Bogner, A., Littig, B., & Menz, W. (Eds.). 2009. *Interviewing Experts*. Basingstoke: Palgrave Macmillan.
- Eva, S.-W. 2021. Carbon Capture, Utilization and Storage Initiative (CCUS) Goals - Rationale for being included in the CEM, *Clean Energy Ministerial*.
- Hakovirta, M., Kovanen, K., Martikainen, S., Manninen, J., & Harlin, A. 2023. Corporate net zero strategy—Opportunities in start-up driven climate innovation. *Business Strategy and the Environment*, 32(6): 3139-3150.
- Mckinsey, x. 2023. The world needs to capture, use, and store gigatons of CO₂: Where and how?
- Pinkse, J., Demirel, P., & Marino, A. 2024. Unlocking innovation for net zero: constraints, enablers, and firm-level transition strategies. *Industry and Innovation*, 31(1): 16-41.
- Snihur, Y., & Markman, G. 2023. Business Model Research: Past, Present, and Future. *Journal of Management Studies*, 60(8): e1-e14.
- Wang, R. 2024. Status and perspectives on CCUS clusters and hubs. *Unconventional Resources*, 4: 100065.