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: *R&D Performance Management in the Energy Sector*

Scope, Aims, Methods, and Initial Literature: Energy utilities are under pressure to decarbonize while keeping energy supply reliable. To succeed, they must understand whether their R&D activities deliver results. The thesis builds on established R&D performance measurement research (Chiesa et al., 2009; Kerssens-van Drongelen et al., 2000; Salimi & Rezaei, 2018; Schumann et al., 1995; Werner & Souder, 1997) and applies it to current challenges of energy incumbents (Costa-Campi et al., 2015; Li & Liu, 2025; Pramangioulis et al., 2019).

This thesis will design and apply a KPI framework tailored to energy-sector R&D, and pursue three goals:

1. **Internal KPIs:** Identify indicators that capture the effectiveness of R&D inside utilities (e.g., technology maturity, readiness for deployment/pilot projects, process efficiency).
2. **External KPIs:** Identify benchmarking metrics that allow utilities to compare themselves with peers (e.g., patent activity, collaboration intensity, innovation intensity, contribution to decarbonization pathways).
3. **KPI framework development and application:** Develop and apply KPI framework to European energy industry.

Methodologically, the study will combine a systematic literature review with expert interviews with R&D managers in energy utilities in Europe. In addition, grey literature should be analyzed (Adams, Smart, & Huff, 2017).

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 largest regional electricity company.* Upon completion of the thesis, the student will receive a certificate confirming that the thesis was carried out in collaboration with the corporate partner to address a real-world business problem.

Expectations and Support: Students will receive constant feedback and have regular meetings with faculty and, where relevant, with the corporate partner. This ensures that the thesis is developed to a high standard, has practical impact, and can be completed on time. To support this process, you will be provided with detailed guidelines covering supervision, writing, expected deliverables, and grading, as well as a starter package to help you successfully launch 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.

Interested? Send CV and grade certificates of all your studies to alexander.engelmann@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.

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Li, Z., & Liu, J. (2025). Impact of supply chain digitalization, business enterprise R&D expenditure and government budget allocations for R&D: A roadmap towards carbon neutrality. *Energy Economics*, 141, 108057.

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Werner, B. M., & Souder, W. E. (1997). Measuring R&D performance—State of the art. *Research-Technology Management, 40*(2), 34–42.