

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:** *Smart Farming in Urban Areas: Application Domains and Business Models for Energy Providers*

**Scope, Aims, Methods, and Initial Literature:** Smart farming refers to the use of digital technologies to enhance the efficiency of farming (Balafoutis et al., 2017; Kelly, 2018; Wolfert, Ge, Verdouw, & Bogaardt, 2017). A key implication of this decentralized approach is the re-industrialization of urban areas (Ashman & Newman, 2018; Westkämper, 2014), shedding light on key players in that areas such as energy providers. The thesis adds to this debate and aims to:

- map key application domains of smart farming
- assess these domains from the perspective of an incumbent energy provider (e.g. using criteria such as strategic fit or market potential)
- develop business models (Chesbrough & Rosenbloom, 2002; Zott, Amit, & Massa, 2011) for energy providers for the most promising application domains

Insights from 1) a systematic review of the scientific literature (Denyer & Tranfield, 2009), 2) selected grey literature (Adams, Smart, & Huff, 2017), as well as 3) expert interviews (Cassell, 2009) should be combined.

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

**Corporate Partner:** None

**Expectations and Support:** Constant feedback and regular meetings with faculty 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 [georg.reischauer@wu.ac.at](mailto:georg.reischauer@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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- Cassell, C. 2009. Interviews in Organizational Research. In D. A. Buchanan, & A. Bryman (Eds.), *The Sage Handbook of Organizational Research Methods*: 500-515. Thousand Oaks: Sage.
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- Westkämper, E. 2014. *Towards the Re-Industrialization of Europe: A Concept for Manufacturing for 2030*: Springer Vieweg.
- Wolfert, S., Ge, L., Verdouw, C., & Bogaardt, M.-J. 2017. Big Data in Smart Farming – A review. *Agricultural Systems*, 153: 69-80.
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