

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: *Direct electrification: Drivers, barriers, and innovative approaches from startups and incumbents*

Scope, Aims, Methods, and Initial Literature: Direct electrification refers to ways and devices providing heat and road transport while directly using electricity as an input (e.g., electric heaters, electric heat pumps, battery electric vehicles, battery-fuelled mileage of plug-in hybrids, trolley vehicles) (Madeddu et al., 2020; Philibert, 2019; Ruhnau et al., 2019; Ueckerdt et al., 2021). Taking a strategic technology management perspective (Christensen, 1992a, 1992b; Hård & Knie, 2001; Huarng, 2010; Schilling & Esmundo, 2009), this thesis aims to

- map and specify (comparative dimensions) the drivers of direct electrification
- map and specify (comparative dimensions) the barriers of direct electrification
- map and specify (comparative dimensions) from startups and incumbents

Insights from 1) a systematic review of the scientific literature (Denyer & Tranfield, 2009), 2) selected grey literature (Adams et al., 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 and Certificate: Verbund – *Austria's leading electricity company and one of the largest producers of hydropower electricity in Europe.* 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 alexander.engelmann@wu.ac.at

Initial References:

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