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BIO

Malte is an Economist at Compass Lexecon, based in Berlin.

Malte is a member of the European energy practice, specializing in regulatory frameworks, market design, and investment analysis for the electricity and gas sectors. He combines quantitative modeling and econometric techniques with strategic and regulatory expertise, supporting clients across the energy value chain, including network operators, utilities, investors, and regulatory authorities.

In the electricity sector, Malte has worked extensively on market design issues, including capacity mechanisms, tariff design, and bidding zone configurations. He has also advised clients on investment decisions, including state aid evaluations, regulatory and market due diligence, and business case development for generation assets, demand-side solutions, and grid infrastructure.

In the gas sector, his work encompasses developing decarbonization strategies for gas infrastructure and advising on the regulatory adjustments required to support these transitions. Additionally, he has contributed to a litigation proceeding concerning the economic suitability of tariff designs in Germany.

Beyond electricity and gas, Malte has advised clients on innovation projects, focusing on data intelligence solutions, business cases for decentralized flexibility solutions, and decarbonization roadmaps for industrial players.

Malte brings over five years of professional experience as a consultant in the energy sector, as well as from various research institutes, the German Federal Ministry of Finance and the transmission system operator TenneT. He holds a Master of Science in Political Economy from the University of Konstanz.

EDUCATION

2019 *M.Sc. Political Economy*, University of Konstanz and Norwegian School of Economics
2017 *B.A. Philosophy & Economics*, University of Bayreuth and EDHEC Business School

PROFESSIONAL EXPERIENCE

2023 – Present *Economist*, Compass Lexecon, Berlin
2022 – 2023 *Senior Analyst*, Compass Lexecon, Berlin
2019 – 2022 *Consultant*, DNV, Bonn

LANGUAGE SKILLS

- German (native)
- English (fluent)
- French (intermediate)

SELECTED CONSULTING EXPERIENCE

Note: The experience listed below includes projects with former employers

Electricity market design

- **ENTSO-E: Transition cost study and liquidity analysis for the bidding zone review (ongoing).** Development of two studies to assess transition costs and impacts on market liquidity and transaction costs from potential bidding zone reconfigurations in several European countries.

- **European Transmission System Operator: Economic study on market design to maintain security of supply of a northern European country.** Development of an economic study on market design to maintain security of supply in the power system of a northern European country.
- **European Transmission System Operator: Economic study on market design to maintain security of supply of a central European country.** Review of power system needs and options to address generation adequacy and grid constraints issues in a central European country. We further assessed main design features of capacity mechanisms in the context of a potential implementation.
- **Verbund: Workshop on capacity markets.** Designing and delivering a workshop on capacity markets and strategic options tailored for Austria.
- **Agora Energiewende: Analysis of policy measures for supporting household customers in times of high electricity prices.** Evaluation of wholesale and retail interventions in power markets against (i) achieving policy targets, (ii) their economic efficiency and (iii) distortions introduced; providing a review of measures introduced across the EU and globally and international case-studies on particular measures implemented.
- **ACER: Methodology development and pilot study on power market characteristics:** Conceptualized a methodology to assess barriers to efficient price formation and the ease of market entry for small players and new players for European power markets for ACER. The project further included the development of an excel-based calculation tool as well as the undertaking of a pilot study.

State aid cases

- **Government of a European country: Economic advice on a state aid case (ongoing).** Assessment of necessity, appropriateness and proportionality of the alleged state aid provided during the contract extension for a nuclear power plant in the EU.

Investment and strategic support

- **International institutional investor: Buy-side regulatory and market due diligence for an interest a large German offshore wind park.** Analysis of the power market and regulatory framework in Germany and the impact on offshore wind installations; developing power price projections for Germany up until 2050 in different scenarios incl. sensitivity analysis; reviewing power commercialisation arrangements and potential additional revenue options.
- **European institutional investor: Buy-side regulatory and commercial due diligence for an interest in the Austrian multi-utility Energie Steiermark:** Analysing the regulatory framework and the company's business plan; providing a market outlook based on own modelling; evaluating risks and underlying assumption in the valuation model in all core business segments.
- **Gas infrastructure investor: Regulatory due diligence of a European gas TSO.** Analysis of regulatory cost determination and tariffing principles and identifying resulting risks (inter alia capacity sales risk, risks from efficiency requirements).
- **Large German utility: Modelling heat pumps offering ancillary services Germany.** Analysis and detailed modelling of the usage of aggregated residential heat pumps as flexibility providers on German ancillary services markets (aFRR and mFRR) for the 2021-2030 period.
- **International Investor: Investment support for an interconnector development between France, Switzerland and Italy:** Economic and regulatory support in the pre-feasibility phase for a potential interconnector development project between France, Switzerland and Italy.
- **Project developer: Sell side commercial due diligence for a group of electrolyzers in development in Norway and South America**
- **International utility: Regulatory due diligence for a gas transmission system operator in Germany**
- **International investor: Commercial due diligence for a wind park in Spain**

Opportunity screening

- **Ardian: Data intelligence for clean energy report.** Development of a report exploring how data and digitalisation can contribute to the optimisation of energy resources and networks to reach a clean energy system.



We analysed the challenges and opportunities for digital solutions along the value chain and developed case studies illustrating the use of digital and data-driven solutions.

- **European steel producer: Analysis of European Electricity and Gas Markets.** Examination of security of supply for electricity and gas; including an analysis of the relevant European gas infrastructure (pipeline & LNG) as well as modelling of the European electricity market.
- **KELAG and regional industry association: Energy sector roadmap for the regional industry:** Development of a strategic vision that explores options for meeting the energy needs of the Carinthian industry, including the potential energy carrier mix.
- **Energie Steiermark and regional industry association: Energy sector roadmap for the regional industry:** Development of a strategic vision that explores options for meeting the energy needs of the Styrian industry, including the potential energy carrier mix and whether these needs could be met through local production or energy imports.
- **Original Equipment Manufacturer: Detailed market analyses based on DNV's Energy Transition Outlook**
- **RWE: Technology scouting for electrification:** Identification and techno-economic assessment of the potential to electrify industrial heat demand in Germany, the Netherlands and Great Britain. The project included both the identification of technological options and their respective barriers as well as the economic requirements. The outcome of the project comprised a forecast for additional electricity demand due to electrification of industrial heat.
- **Original Equipment Manufacturer: Market analysis for future inverter needs.** In the study, future demand was estimated for different geographical regions and use cases such as solar PV farms and electrolyzers. The analysis was based on and extended existing global energy system studies.

Power Purchase Agreements (PPA)

- **European steel producer: PPA valuation.** Design and valuation of a long-term power purchase agreement.
- **VW: Assessment of market conformity for a PPA.** Study on the prevalence of State Aid in a power supply contract for a battery production facility in a European country.

Tariff design / network regulation

- **50Hertz: Primer on forward-looking network regulation of OPEX and on financeability.** Development of case studies on the OPEX regulation systems in the UK, the Netherlands, Australia and Austria and other conceptual approaches. In addition, we analysed described OFGEMs approach to financeability monitoring.
- **Thyssengas: Hydrogen network regulation review.** Economic brief comparing the risk profiles of hydrogen network operators with those of electricity TSOs and addressing questions regarding risk allocation efficiency and aspects of the proposed regulatory framework.
- **Institut Luxembourgeois de Régulation (ILR): Future-proof tariff design:** The project comprised the conceptual assessment of different potential tariff designs for electricity distribution systems in Luxembourg. For this purpose, two sets of criteria – economic and feasibility – have been identified and discussed with stakeholders; potential remedies to downsides of the different tariff designs have been developed.
- **International utility: Advise on German network regulation:** Providing an overview and elaborating on various requested aspects of the German electricity network regulation.
- **ERRA: Course on incentive regulation in electricity networks:** Prepared and held a lecture organised by ERRA on efficiency analysis in a course on incentive regulation.
- **ACM: Study on an estimation method for the additional efficient operating expenditure of the Dutch TSO's offshore grid:** Study to develop and evaluate different methods for estimating the additional (incremental) efficient operating expenditure that TenneT will incur with the operation of existing and the commissioning of new parts of the offshore grid during the regulatory period 2022 - 2026.
- **Group of TSOs and a shipper: Expert opinion on economic suitability of German gas transmission network tariffs.** Assessment of the economic properties and the potential economic effects of the REGENT ordinances on cost reflectivity of transmission charges, investment incentives, market liquidity and competition.



Furthermore, the study provides possible alternative reference price methods for establishment of gas transmission charges.

Hydrogen and clean gases

- **Austrian Electricity Industry Association (Österreichs Energie): Green Hydrogen Roadmap.** Assessment of the targets & requirements, drivers, hurdles (technical, commercial, regulatory) and interdependencies for scaling-up green hydrogen business cases in Austria (green hydrogen production / electrolyzers, hydrogen-based electricity generation and hydrogen storage). ([link](#))
- **Swiss Federal Office for Energy (BFE): Hydrogen support strategy.** Development of a framework for the support of hydrogen and hydrogen derivative use cases in Switzerland. Analysis of the economics of hydrogen production and use as feedstock as well as for electricity and heat production and in the mobility sector based on modelling of the European hydrogen market. Assessment of commercial bottlenecks (inter alia cost gaps per use case) and a set of regulatory measures to overcome them. Recommendation for regulatory interventions in the mid and longer-term to build-up the Swiss hydrogen sector in line with the targets outlined in the BFE's Swiss energy system scenario ("Energie Perspektiven 2050+")
- **Inter-American Development Bank: Pre-Feasibility Study for a Hydrogen Export Project in Chile:** The study to produced key information and recommendations for public and private stakeholders, including government authorities, on the optimal technologies, infrastructure, timings, sizing, location, and business models that would altogether englobe a new export terminal for hydrogen via maritime transportation in Chile.
- **Terranets bw: Hydrogen roll-out strategy:** The project comprised the modelling of future expected hydrogen demand in southwest Germany for the sectors heating, industry, mobility, and utilities. Necessary adaptations to the transmission grid and business options were identified for terranets bw and discussed with senior management.
- **International logistics company: Market entry study for hydrogen for a transport and logistics company**

Decarbonisation studies

- **Austrian Technical Association for the Gas and Water Industry (ÖVGW): Gas network transformation 2040 (ongoing).** Assessment of the transformation requirements for low-pressure gas networks, including an analysis of the resulting business needs for network operators and the associated regulatory challenges.
- **Wiener Netze: Decarbonisation impact on urban energy distribution grids.** Modelling required changes to the gas, electricity and district heating grids, estimated costs and investments for the transformatoin, identified techno-economic and regulatory transformation hurdles and – where possible – pointed out potential mitigation measures
- **Wiener Netze: Measures to reduce electricity DSO investments for energy system decarbonisation:** Modelling-based identification and impact quantification of measures (technological and regulatory) to reduce investment needs in the electricity distribution grid; assessment of implementation steps and implementation hurdles; deduction of measures with the best strategic fit.
- **Alliander: DSO Investment needs estimation:** Bottom-up modelling of mid-term investment needs of a DSO that may be attributed to electrification and the energy transition. The identified drivers for additional investment needs were a) RES installations, b) installation of heat pumps, c) development of electric vehicle charging infrastructure.