

# Geothermal Energy Heat and Power From the Earth

Our expertise. Hits the mark.





## **Geothermal Energy – Heat and Power From the Earth**

The consequences of global warming are becoming increasingly visible worldwide. When it comes to reducing greenhouse gas emissions, electricity generation and energy-intensive manufacturing industries were for a long time the centre of attention. Yet, about half of the total national energy consumption is attributable to the heating sector. The use of carbon-neutral geothermal energy is one of the **key elements to the heat transition**.

**Shallow geothermal energy** enables the supply of heating and cooling to buildings and entire neighbourhoods. **Deep geothermal energy**, on the other hand, can be used to provide carbon-neutral process heat for industry and trade. Renewable electricity can also be generated from geothermal energy. This makes it possible to benefit from statutory subsidies, thus improving the economic viability of geothermal projects. In addition to using geothermal energy for industrial heat, there are also many other fields of application for geothermal energy, such as agricultural use, thermal bath heating or lithium production. There are positive market developments for both shallow and deep geothermal energy.

The most important factors for the **economic viability of geothermal projects**, apart from the discovery of thermal water at appropriate temperatures and a sufficient production rate, are:

- a good customer structure with year-round heat consumption and
- funds to finance the investment, for example, from private investors, federal subsidies, state subsidy programmes and statutory funding under the German Renewable Energy Sources Act ("EEG") and/or the Combined Heat and Power Act ("KWKG").

Further decisive factors are a reliable assessment of the legal framework, especially in the fields of mining and water law, construction planning law and the law governing the relations between neighbours, as well as experience in drafting plant construction and purchasing contracts and – in the case of public sector projects – legally secure sourcing from a public procurement and contract law perspective.

With their expertise and **industry knowledge** and **many years of experience** advising on numerous complex energy projects, Luther's experts make the difference in your geothermal project. We have not only just identified geothermal energy as a topic for the future – our first project dates back to 2008!



## When things get difficult ....

**Energy Industry Group.** Luther's Energy team consists of around 45 experienced experts who offer full-service legal and tax advice to energy suppliers, project developers, industrial companies, financial investors as well as governments and the public sector. The experts in our Energy industry group provide top-quality advice across the entire value chain, be it on projects regarding conventional or renewable energy, on infrastructures such as energy supply grids or storage facilities, on transactions or other innovation projects, on energy trading as well as on the distribution of energy or on contracting projects. Due to their many years of experience in the energy sector, our advisors have first-class industry knowledge and expertise in technical and economic matters. We also use specialists to handle project management tasks in particularly complex projects that we have been mandated with. Luther's Energy team is also well-known for its special expertise in dealing with legal disputes all the way to the highest courts, and in arbitration proceedings. Internationally, we work closely with leading law firms who, like us, focus on providing comprehensive advice in the energy sector.

#### **Expertise**



Excellent legal knowledge is our experience and good relations with governments and public authorities help us provide correct assessments.

#### Interdisciplinary



Our team of advisors is closely trademark. Many years of networked in the market with and technical economic consultants. When things get very complex and difficult, we know who to rely on.

#### **Innovative**



Innovation topics such geothermal energy have not just been on our minds since yesterday: our energy team has been advising on the climatefriendly use of geothermal energy since 2008.

#### **Trendsetting**



We are already thinking about tomorrow. We are supporting the further development of the European and national legal framework with our expertise and many years of experience in legislative processes.

#### **Excellent**



many vears now distinguished by the German and legal publisher JUVE and The Legal 500 as a leader in projects and regulation in the energy industry due to the large number of outstanding lawyers on our team.

## Extensive expertise for your geothermal project

Mining Law	Energy Regulatory Law	Financing and Funding Programmes	Corporate/M&A
Real Estate	Public Procurement Law	Renewable Energy and Combined Heat and Power Law	Energy Tax Law
Water Law	Plant Construction Law	Environmental and Planning Law	District Heating Law, Energy Contract Law and Corporate PPAs

## References

#### **MVV Energie AG**

Advice on licensing law for the new construction of a total of four (deep) geothermal plants and organisation of a workshop on the licensing procedures under mining and water law, as well as construction and immission control law

#### Stadtwerke Münster

Legal advice on project structuring, the preparation of tender documents, the implementation of tenders and the negotiation of contracts within the "Deep Geothermal Energy Münster Feasibility Study" project (incl. seismics). The project is intended to confirm the feasibility and scalability of deep geothermal energy in Münster and the potential of the technology in North Rhine-Westphalia. This early geothermal project is intended to serve as a "door opener" for further projects in NRW

#### **Stadtwerke Neuruppin GmbH**

Comprehensive advice on the new construction of a (deep) geothermal plant worth EUR 25.5 million, including project structuring, preparation of tender documents, arranging of the tender and negotiation of contracts and supplements

#### **Public utility company**

Procurement and contract law advice on the new construction of a (deep) geothermal plant worth EUR 10 million

#### **Energieversorgung Schwerin GmbH & Co. Erzeugung KG**

Comprehensive advice on the construction of a new (deep) geothermal plant worth EUR 20 million, including project structuring, preparation of tender documents, implementation of the tender and negotiation of contracts and addenda

#### **EVH GmbH**

Legal advice on project structuring, drafting the tender documents, arranging the tender and negotiating the contracts within the "district heating transformation plan of Stadtwerke Halle (Saale)" project: As part of the "Federal subsidisation for efficient heating networks (BEW), a concrete decarbonisation path (including geothermal energy) for district heating in Halle (Saale) is to be developed with the help of a heat transformation plan (WTP) in order to achieve greenhouse gas neutrality in the heat supply by 2045

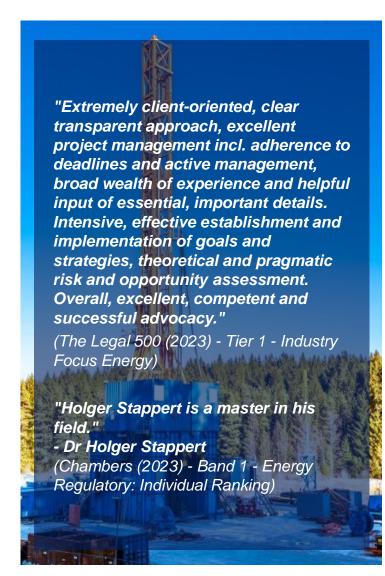
"In the energy sector, Stappert's team is one of the leading practices with indepth regulatory and contract expertise ... Industry giants such as LEAG consult Luther on major projects in connection with the energy transition, for example in areas such as hydrogen production or geothermal energy." (JUVE Guide (2023/2024) - Tier 1 Energy: Regulatory Law) "Very helpful, efficient and fast, they don't look for problems but offer effective solutions." (The Legal 500 (2023) - Band 1 - Industry Focus Energy) "Very competent, always up-to-date, very communicative and pleasant to deal with."

(The Legal 500 (2023) - Industry Focus

- Dr Holger Stappert

Energy)

## References



#### **Energy supplier**

Following damage to the borehole, comprehensive advice on a (deep) geothermal project consisting of geothermal feeding of two ORC systems for electricity production and feeding heat into a district heating network and for heating greenhouses

#### **Energy supplier**

Advice on bundling conventional district heating business with innovative heat-based energy/neighbourhood solutions in the form of deep geothermal energy and geothermal probe fields, including the drafting of contracts to secure the project

#### **RWTH Aachen GmbH**

EU-wide tender for an innovative neighbourhood concept based on a complex project contract, consisting of a so-called anergy grid, a cold local heating grid fed by heat from a large number of borehole heat exchangers and, in addition, from solar collectors and waste heat

#### **Installation companies**

Enforcement of claims for drilling work performed to connect geothermal heating systems

#### **Geo-En Energy Technologies GmbH**

Advice on the construction of a geothermal plant in a water protection area in the state of Berlin

#### Real estate company

Advice on the approval of the construction of a geothermal plant under water law

#### EGR Entwicklungsgesellschaft Ruhr-Bochum mbH

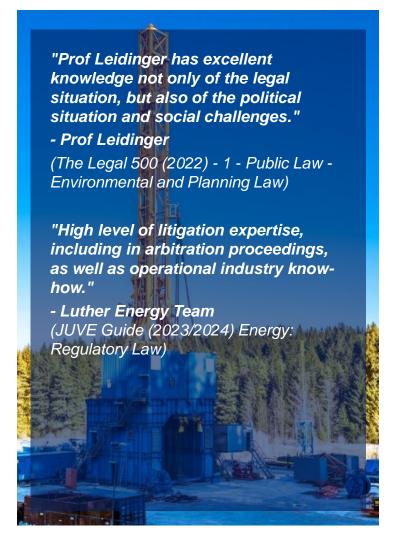
Public procurement law support for the tendering of planning services for the construction of a geothermal start-up centre

#### Stadtwerke Leipzig

Advice on procurement and contract law for a combined heat and power plant as well as advice on construction and immission control law for the construction of a combined heat and power plant

## References







### Contact

#### If you have any questions, please contact your contact person at Luther or one of the experts listed below:



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