## Luther.

## Geothermal Energy – Heat and Power From the Earth

Our expertise. Hits the mark.

Legal and Tax Advice | www.luther-lawfirm.com



## **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**.

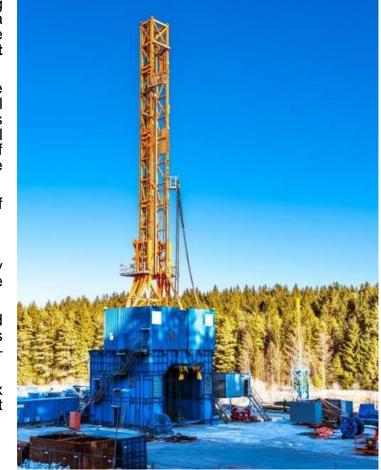
**Shallow geothermal energy** enables the supply of heating and cooling to buildings and entire neighbourhoods. **Deep geothermal energy**, on the other hand, can be used to provide carbon-neutral process heat for industry and trade. Renewable electricity can also be generated from geothermal energy. 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.



### 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

#### **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 Prenzlau GmbH

Stadtwerke Prenzlau GmbH intends to expand and densify its existing district heating network by 2040, which will also involve converting its current heat generation system, which is largely based on natural gas, to a largely climate-neutral generation system. Luther is advising on the corresponding tenders for the implementation of the heat transformation plan and the new construction of a (deep) geothermal plant worth around EUR 43 million, including project structuring, preparation of the tender documents, implementation of the tender and negotiation of the contracts and addenda

#### 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

#### 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

"In the energy sector, Stappert's team is one of the leading law firms 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 (2023/2024) – Tier 1 – Energy Law: Regulatory

"Very helpful, efficient and fast, they don't look for problems but offer effective solutions." The Legal 500 (2023) – Tier 1 – Industry Focus Energy

"Holger Stappert is a master in his field." Chambers Europe (2023) – Band 1 – Energy: Regulatory

"The practice's strength continues to lie in environmental and planning law, where it is a recognised market leader." JUVE (2023/2024) – Tier 1 – Environmental and Planning Law

"In close cooperation with the firm's internal energy and procurement law practices, the environmental and planning team of Luther Rechtsanwaltsgesellschaft mbH is ideally positioned to accompany important infrastructure and industrial projects of the energy and climate transition. The team is involved in various large-scale decarbonization projects and advises industrial companies on strategic issues as well as on immission control, nature conservation and water law." The Legal 500 (2024) – Tier 1 – Public Law: Environmental and Planning Law

#### **Public utility company**

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

#### **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

#### **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

#### 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

#### EGR Entwicklungsgesellschaft Ruhr-Bochum mbH

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

#### Municipal utility company in a major city in Brandenburg

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

#### Major district town in Baden-Württemberg

Advice on procurement and contract law for the construction of a new (deep) geothermal plant

"In addition to the extraordinarily high level of legal qualifications, the Luther team also brings in-depth economic thinking and very high personal skills. The consultation is very complex; Aspects not addressed by the client are proactively pointed out. The lawyers are very easy to reach. All in all a very successful cooperation." The Legal 500 (2023) – Tier 1 – Industry Focus Energy

"The team is very goal-oriented. Very punctual despite the high workload. The use of IT is absolutely contemporary. Many appointments are held via online meetings and thus significantly reduce transaction times. The billing is very transparent and can easily be incorporated into your own billing structure." The Legal 500 (2023) – Tier 1 – Public

Law: Environmental and Planning Law

"Holger Stappert is excellently connected in the energy scene, which means that besides the pure energy advice you have a good feeling about what is happening in the market."

– **Dr Holger Stappert** Chambers Europe (2023) – Band 1 – Energy: Regulatory

"In the present task, she managed to involve numerous contributors from different technical and scientific disciplines, some with different objectives, in the work in such a way that a broad consensus on the work result could be achieved. The goal of the assignment was always taken into account."

– **Dr Sabrina Desens** The Legal 500 (2024) – Tier 1 – Public Law: Environmental and Planning Law "Prof Leidinger has excellent knowledge not only of the legal situation, but also of the political situation and social challenges."

– Professor Tobias Leidinger

The Legal 500 (2022) – Tier 1 – Public Law: Environmental and Planning Law

"Offers expert, experienced, fast and efficient advice in immission control law."

– **Dr Stefan Altenschmidt** The Legal 500 (2024) – Tier 1 – Public Law: Environmental and Planning Law

"Pleasant cooperation, very clientoriented, delivers on time, fair billing." – Dr Michael Bormann The Legal 500 (2023) – Tier 4 – M&A: medium-sized deals "Very good expertise, negotiating skills, flexibility, focus on the project goal."

– Karsten Köhler The Legal 500 (2021) – Tier 3 – Public Law: Public Procurement Law

"Good expertise, flexibility, availability, solution-orientated."

– Daniel Naumann The Legal 500 (2021) – Tier 3 – Public Law: Public Procurement Law

"The team is characterised by a high and up-to-date level of knowledge, absolute reliability and very good results."

The Legal 500 (2024) – Tier 2 – Public Law: Public Procurement Law

### Contact

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



#### Dr Holger Stappert Lawyer, Partner

Energy Law, Antitrust Law Coordinator Energy Industry Group Dusseldorf



#### holger.stappert@luther-lawfirm.com

Karsten Köhler Lawyer, Certified Specialist in Public Procurement Law, Partner

Public Procurement Law, Plant Construction Law Leipzig

kasten.koehler@luther-lawfirm.com



#### Andreas Mally Lawyer, Counsel Real Estate Leipzig

andreas.mally@luther-lawfirm.com





Daniel Naumann Lawyer, Partner

> Public Procurement Law, Plant Construction Law Leipzig

daniel.naumann@luther-lawfirm.com

Cosima Flock Lawyer, Counsel

Energy Law, Antitrust Law Dusseldorf

cosima.flock@luther-lawfirm.com

**Prof. Dr Tobias Leidinger** Lawyer, Certified Specialist in Administrative Law, Partner

Environment & Planning Law, Regulatory (incl. mining and water law) Dusseldorf

tobias.leidinger@luther-lawfirm.com



David Wölting Lawyer, Senior Associate

Energy Law, Antitrust Law Dusseldorf

david.woelting@luther-lawfirm.com



Dr Sabrina Desens Lawyer, Certified Specialist in Administrative Law, Partner

Environment & Planning Law, Regulatory (incl. mining and water law) Leipzig

sabrina.desens@luther-lawfirm.com

Dr Frederic Tewes Lawyer, Senior Associate Real Estate Dusseldorf

frederic.tewes@luther-lawfirm.com

### Contact

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



Dr Stefan Altenschmidt, LL.M. (Nottingham) Lawyer, Partner

Environment & Planning Law, Regulatory (incl. mining and water law) Dusseldorf

stefan.altenschmidt@luther-lawfirm.com



Dr Guido Jansen Lawyer, Partner,

Location Head Energy Law, Antitrust Law Dusseldorf

guido.jansen@luther-lawfirm.com



Volkan Top Lawyer, Senior Associate Capital Markets, Banking & Finance

volkan.top@luther-lawfirm.com

**Dr Michael Bormann** Lawyer, Partner

Corporate/M&A Dusseldorf

Hamburg

michael.bormann@luther-lawfirm.com



Lea Franken Lawyer, Associate

Environment & Planning Law, Regulatory (incl. mining and water law) Dusseldorf

lea.franken@luther-lawfirm.com

Marc Urlichs Lawyer, Counsel Corporate/M&A Dusseldorf

marc.urlichs@luther-lawfirm.com



Luther | 06/08/2024 | 10

# Luther.

Bangkok, Berlin, Brussels, Cologne, Delhi-Gurugram, Dusseldorf, Essen, Frankfurt a.M., Hamburg, Hanover, Ho Chi Minh City, Kuala Lumpur, Jakarta, Leipzig, London, Luxembourg, Munich, Shanghai, Singapore, Stuttgart, Yangon

You can find further information at: www.luther-lawfirm.com www.luther-services.com

The presentation does not constitute legal or tax advice and we are therefore not liable for the content. This takes place individually, taking into account the circumstances of the individual case, on the basis of our on the basis of our mandate agreement. The distribution, quotation and duplication - even in of the content - even in part - for the purpose of passing it on to third parties is only permitted by prior agreement.

Released: 06 August 2024

Legal and Tax Advice | www.luther-lawfirm.com

