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# Hydrogen – Energy and Mobility of the Future

Our expertise. Hits the mark.

# Hydrogen – Energy and Mobility of the Future

Global climate protection is the challenge of the century. Binding climate protection targets agreed worldwide will permanently change the economic market environment of all industries, in particular, the energy sector. Climate protection and the preservation of resources will become increasingly important factors, not only in the energy supply and in the industrial power industry, but also in the heating and mobility sector. A key element to achieving greenhouse gas neutrality will be the use of hydrogen.

The EU Commission's Green Deal and the German Federal Government's Climate Protection Programme contain individual relevant hydrogen strategies. The goal of both schemes is the development of a hydrogen industry that shifts away from today's predominant use of grey hydrogen to the use of green hydrogen in 2050.

The current key drivers for the economic viability of hydrogen projects are:

- the legal framework (such as RED III, the EU package for decarbonising the hydrogen and gas markets, the delegated regulations on renewable fuels of non-biological origin);
- the introduction of extensive funding opportunities and new tendering procedures, for example for hydrogen power plants and the expansion of the hydrogen core network, and
- the conclusion of long-term electricity supply contracts, known as PPAs, as industrial electricity consumers, for example, want to decarbonise their electricity supply and benefit from long-term price certainty.

Our experts at Luther, who have detailed know-how and industry knowledge about these drivers and many years of experience advising on numerous complex energy projects, can make the difference for your hydrogen projects. We have not only just identified hydrogen as a topic of the future: our first project dates back to 2009!



# When things get difficult...

**Energy Industry Group.** Luther's Energy team consists of around 50 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 from our Energy industry group provide you top-quality advice throughout the value chain, be it on projects regarding conventional or renewable energy sources, on infrastructure, such as energy supply networks or storage facilities, on transactions or other innovation projects, on energy trading and the distribution of energy or on contracting projects. Due to their wealth of experience in the energy sector, our advisors have first-class knowledge of the industry and also 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 trademark. Many years of experience and good relations with governments and public authorities help us provide correct assessments.

## Interdisciplinary



Our teams of advisors are closely networked in the market with technical and economic consultants. When things get very complex and difficult, we know who to rely on.

## Innovative



Innovation topics, such as the hydrogen industry, have not just been on our minds since yesterday: our Energy team has been advising on the climate-friendly use of hydrogen since 2009.

## Future-oriented



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

## Excellent



For many years now distinguished by the German 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.

# Excellent expertise for your hydrogen project

Antitrust law and  
R&D agreements

EU and national energy  
regulatory law

Renewable energy law

Energy contract law and  
(corporate) PPAs

EU state aid law

Energy tax law

Public procurement law

Plant construction law

Emissions trading law

Corporate/M&A

Financing and subsidy  
programmes

Environmental and planning  
law



# References

## **SHS – Stahl-Holding-Saar GmbH & Co. KGaA**

Advice in the context of Europe's largest decarbonisation project in the steel industry, 'Power4Steel' by SHS – Stahl-Holding-Saar GmbH & Co. KGaA, with the aim of converting iron and steel plants to green steel production and achieving carbon neutrality by 2045. Comprehensive legal support for the tendering process for the procurement of 60,000 tonnes of green hydrogen, which involved numerous complex energy law and public procurement law issues at the interface with state aid law. Support in drafting contracts for the supply of the future direct reduction plant (DRI) via the cross-border German-French hydrogen network mosaHYc, which will ensure supply from an electrolyser to be built in Carling (France).

## **SEFE Securing Energy for Europe GmbH**

Advice on several high-volume international import contracts for hydrogen and ammonia from Canada, Norway, etc.

## **LEAG**

Comprehensive advice on hydrogen projects in Brandenburg, Saxony, Saxony-Anhalt

## **Energy supplier**

Advice on the planned investment in the APEX Group, a provider of complete hydrogen solutions

## **MET**

Advice on the establishment of the joint venture H2 Lubmin with the hydrogen producer HH2E and the subsequent exit from the joint venture through the sale of the shareholding from to the infrastructure investor Foresight

## **Energy supplier**

Advice on the planned entry into a joint venture with Nikola, the U.S. manufacturer of hydrogen trucks, for the distribution of hydrogen

***“Luther offers a unique combination of industry knowledge, legal excellence and innovation.”***

*The Legal 500 (2025) – Tier 1 – Industry  
Focus Energy: Regulatory Advice*

***“Knowledgeable, experienced, pragmatic. Gets to the point quickly. Work has high practical applicability.”***

*The Legal 500 (2025) – Tier 1 – Public Law:  
Environmental and Planning Law*

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

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

# References

***“Top performance. Certainly one of the strongest teams in Germany when it comes to energy law.”***

*The Legal 500 (2024) – Tier 1 – Industry  
Focus Energy: Regulatory Advice*

***“Highly competent at the interface between energy law and antitrust law,”  
“thinks economically,” “very good project management.”***

***– Dr Holger Stappert***

*JUVE (2024/2025) – Tier 1 – Energy Law:  
Regulatory, Law Firm of the Year for  
Regulation 2024*

***“Very good coverage of public and corporate law interaction by a mixed team of relevant experts.”***

*The Legal 500 (2025) – Tier 1 – Public Law:  
Environmental and Planning Law*

## **Refinery**

Advice on the establishment of a joint venture with a leading utility for the construction and operation of a 100 MW plus x electrolyser for the production of green hydrogen, including advice on long-term PPAs from offshore wind power, connection to redirected gas transmission networks as well as to a partially newly constructed hydrogen network, underground storage of hydrogen and project management

## **Avacon**

Providing comprehensive legal advice on the “wind-to-hydrogen” flagship project for emission-free steel production in a joint venture with Salzgitter Flachstahl and Linde, comprising the construction of a PEM electrolysis plant and an onshore wind farm

## **Lower Saxony public transport company (LNVG Niedersachsen)**

Providing comprehensive advice on a pilot project regarding the procurement of 14 hydrogen-powered trains; assisting with the contract award procedure, discussing the requirements for a subsidy for the trains with the authority granting the subsidy, advising on the plan approval procedure for the hydrogen filling station, negotiating all contracts with Alstom and Linde as a syndicate

## **Open Grid Europe**

Providing comprehensive advice on the formation of the “evety” joint venture with the technical inspection association TÜV SÜD and the management consultants Horváth & Partner regarding the use of hydrogen as a technology of the future

## **Leipzig public utilities (Stadtwerke Leipzig)**

Conducting the contract award procedure and providing advice during the construction of a 120 MW gas turbine power plant equipped with technology designed for 100% green hydrogen

# References

## Salzgitter Flachstahl

Advice on the climate protection law aspects of hydrogen-based steel production

## ArcelorMittal

Advice on whether hydrogen can be taken into account for the purposes of the German Greenhouse Gas Emissions Trading Act (TEHG)

## ArcelorMittal

Advice on the climate protection law aspects of switching to hydrogen-based steel production

## Power plant operator

Advice on converting a large black-coal-fired power plant to operate on hydrogen as a fuel

## Mitsui & Co.


Advice on the acquisition of a stake in the ride pooling provider CleverShuttle (mobility service involving hydrogen-powered cars)

## Evonik Degussa GmbH

Representation in proceedings for a preliminary ruling from the ECJ regarding burdens on hydrogen production resulting from EU climate protection law

## ThyssenKrupp Steel Europe

Advice on the climate protection law aspects of switching to hydrogen-based steel production



*“Gerd Stuhlmacher knows the energy industry like no other. This does not only apply to Germany and Europe, he is networked worldwide and knows the stakeholders in the legal profession, companies and authorities. An outstanding legal and energy expert.”*

– Gerd Stuhlmacher  
The Legal 500 (2025) – Tier 1 – Industry  
Focus Energy: Regulatory Advice

*“Angelo Vallone is an outstanding lawyer with in-depth knowledge.”*

– Dr Angelo Vallone  
The Legal 500 (2025) – Tier 1 – Industry  
Focus Energy: Regulatory Advice

# References

*“Stefan Mager is characterised by a very high level of specialist knowledge of procurement law. Thanks to his wealth of experience, his suggestions are always goal-oriented and practical. All challenges that arose were addressed quickly and constructively.”*

– Dr Stefan Mager

*The Legal 500 (2024) – Tier 1 – Public Law: Public Procurement Law*

*“Stefan Altenschmidt works very practically.”*

– Dr Stefan Altenschmidt, LL.M.

*The Legal 500 (2025) – Tier 1 – Public Law: Environmental and Planning Law*

## Refinery

Advice on a project regarding taking hydrogen into account in the greenhouse gas emissions reduction rate when using hydrogen in refineries

## Worlée-Chemie GmbH

Advice on developing a strategy for greenhouse gas neutral production by 2050

## Glass manufacturer

Providing environmental energy and planning law advice with regard to switching to hydrogen-based glass production

## Industrial gases manufacturer

Advice on the grid connection of a hydrogen electrolysis system

## Thermal treatment plant

Advice on developing a strategy for greenhouse gas neutral production by 2050

## ITAD – Interessengemeinschaft der Thermischen Abfallbehandlungsanlagen in Deutschland e.V. (a community of interest of German thermal waste treatment plants)

Advice on how to integrate thermal waste treatment into the hydrogen production for decarbonisation as part of the energy transition

## Holcim (Deutschland) GmbH

Advice on switching completely to the renewable energy source hydrogen as a basis for cement production within the group



# References

## Refinery

Advice on using “green hydrogen” in connection with EU requirements for the reduction of greenhouse gas emissions in fuel production for the transport sector

## Industrial gases manufacturer

Providing energy law advice with regard to a planned production facility for the production of hydrogen and carbon monoxide in an industrial estate

## Gas storage facility operator

Analysing business models in the field of energy storage in selected jurisdictions (USA, UK, Sweden, France, Hungary, Czech Republic, Benelux)

## Gas storage facility operator

Advice on a project regarding taking hydrogen into account in the biofuel quota (today, greenhouse gas emissions reduction rate) when using hydrogen in refineries

## Gas storage facility operator

Carrying out a comprehensive analysis of the national and European legal framework and assessing about 100 business models for the use of hydrogen and Power to X using energy storage facilities

## Builder of P2G plants

Advice on an innovation project regarding hydrogen carried out in cooperation with an automobile manufacturer and an energy provider; 6.3 MW electrolyser system

*“Michael Bormann is very practice-oriented and has an extremely high level of service awareness.”*

*– Dr Michael Bormann*

*Chambers Global (2025) – Band 5 – Corporate/M&A Mid-Market*

*“Excellent antitrust lawyer and proven expert in energy law.”*

*– Dr Guido Jansen*

*JUVE (2023/2024) – Tier 1 – Energy Law: Regulatory*

*“Extensive experience and in-depth legal knowledge.”*

*– Dr Helmut Janssen, LL.M.*

*JUVE (2024/2025) – Tier 3 – State Aid Law*

# Contact

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



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Munich, Shanghai, Singapore, Stuttgart, Yangon**

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