

Luther.

# 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:

- legal framework conditions (such as charges, or the exemption from levies and other charges, or the transposition of RED II into national law);
- subsidy programmes for hydrogen projects at European or national level;
- legal framework and development of the price of carbon certificates.

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 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 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 team of advisors is 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. We are supporting the further development of the European and national legal frameworks with our expertise and many years of experience in legislative processes.

## Excellence



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 R&D Agreements	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

## Refinery

Advising on the construction of a 100 MW electrolysis plant to produce green hydrogen; joint venture with a leading energy supplier; long-term PPA from offshore wind power; connection to former gas transmission networks and to a partly newly created hydrogen network; underground storage of hydrogen

## Avacon

Providing comprehensive legal advice on “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(el) gas turbine power plant equipped with technology designed for 100% green hydrogen

*“Best-in-class know-how in all regulatory matters relating to energy. We are always highly satisfied. Advice is always spot-on.”*

*(The Legal 500 (2021) – Tier 1 – Industry focus Energy)*

*“Great, long-standing expertise, quick response time.”*

*“Quick response. Great commitment. Prudent advice.”*

*(The Legal 500 (2021) – Tier 1 – Industry focus Energy)*

*“Strong on energy issues, pleasant on a personal level”,*

*“intelligent, experienced, friendly”,*

*“competent and very pleasant to deal with”.*

*(JUVE (2020/2021) – Tier 1 – Regulated Industries - Energy Law)*

# References

*“Excellent knowledge of the developments in and the current state of energy law. Thinks outside the box. Quick response time.”*

*“Proven expert in energy law; very detailed knowledge; good interdisciplinary understanding of matters relating to the energy industry (e.g. at the interfaces to technical issues); good availability; well networked in the energy sector and, therefore, with valuable insights into ‘industry insides’ for the benefit of clients.”*

*“High level of expertise, great practical relevance, quick turnaround, representation with great skill and confidence in court proceedings.”*

*(The Legal 500 (2021) – Tier 1 – Industry focus Energy)*

## **Salzgitter Flachstahl**

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

## **ArcelorMittal**

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

## **ArcelorMittal**

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

## **Power plant operator**

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

## **Mitsui & Co.**

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

## **Evonik Degussa GmbH**

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

## **ThyssenKrupp Steel Europe**

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

# References

## Refinery

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

## Worlée-Chemie GmbH

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

Advising on connecting a hydrogen electrolysis system

## Schwarza thermal treatment plant

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

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

## Holcim (Deutschland) GmbH

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

*“High level of expertise, great practical relevance, quick turnaround, representation with great skill and confidence in court proceedings.”*

*“Excellent knowledge of the developments in and the current state of energy law. Quick response time.”*

*(JUVE (2020/2021) – Tier 1 – Regulated Industries - Energy Law)*

*“Leading advisor in Regulatory Law”*

*– Dr Holger Stappert*

*(JUVE (2020/2021) – Tier 1)*

*“National Leader in Energy”*

*– Dr Holger Stappert*

*(Who’s Who Legal (2021) – Energy)*

*“Very practical advice with a focus on what matters; quick response times; compared to many other law firms, very concrete statements and assessments regarding individual facts without continually repeating ‘disclaimers’.”*

*(The Legal 500 (2021) – Tier 1 – Industry focus Energy)*

# References

***“Very good specialist knowledge, negotiating skills, flexibility, focus on the project goal.”***

*(The Legal 500 (2021) – Public Law - Public Procurement Law)*

***“Very good industry know-how. Very high availability and reliability in often very time critical and complex M&A transactions!”***

*(The Legal 500 (2021) – Tier 1 – Industry focus Energy)*

***“Is an absolute expert in energy law and on the German Greenhouse Gas Emissions Trading Act (TEHG)!”***

*(The Legal 500 (2020) – Public Law - Environmental and Planning Law)*

## **Refinery**

Advising 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**

Advising 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**

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

# Contact persons

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  
Dusseldorf

holger.stappert@luther-lawfirm.com



**Dr Guido Jansen**  
Lawyer, Partner

Energy Law, Antitrust Law  
Dusseldorf

guido.jansen@luther-lawfirm.com



**Dr Angelo Vallone**  
Lawyer, Partner

Energy Law  
Dusseldorf

angelo.vallone@luther-lawfirm.com



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

Environmental Energy and Planning Law  
Dusseldorf

stefan.altenschmidt@luther-lawfirm.com



**Dr Gernot-Rüdiger Engel**  
Lawyer, Partner

Environmental Energy Law  
Hamburg

gernot.engel@luther-lawfirm.com



**Dr Michael Bormann**  
Lawyer, Partner

Corporate/M&A  
Dusseldorf

michael.bormann@luther-lawfirm.com



**Karsten Köhler**  
Lawyer, Partner

Plant Construction and  
Public Procurement Law  
Leipzig

karsten.koehler@luther-lawfirm.com



**Ulf-Dieter Pape**  
Lawyer, Partner

Public Procurement and State Aid Law  
Hanover

ulf-dieter.pape@luther-lawfirm.com



**Dr Stefan Mager**  
Lawyer, Partner

Public Procurement Law  
Essen

stefan.mager@luther-lawfirm.com

# Luther.

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

Further information can be found at:

[www.luther-lawfirm.com](http://www.luther-lawfirm.com)

[www.luther-services.com](http://www.luther-services.com)

As at: May 2021

This presentation does not constitute legal or tax advice and we are, therefore, not liable for its contents. This presentation is given individually on the basis of our engagement letter, taking into account the circumstances of the particular case. Any distribution, quotation or reproduction of all or any part of its contents for disclosure to third parties is only permitted with our prior agreement.

