

@SPEGERMANY

NEWSLETTER



INSPIRING FUTURE ENERGY LEADERS.

**SPE AMBASSADOR LECTURE PROGRAM
AT TU CLAUSTHAL**



**PROF. MATTHIAS REICH
THE HIGHLIGHTED GSSPE
MEMBER OF THE
QUARTER**





21ST PIPELINE TECHNOLOGY CONFERENCE

27-30 APR 2026, BERLIN

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STUDENT TECHNICAL CONGRESS

SPONSORS 2026

2 STUDENT TECHNICAL CONGRESS

April 8th -10th



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IMPRESSUM

SPE Ambassador Lecture Program at TU Clausthal

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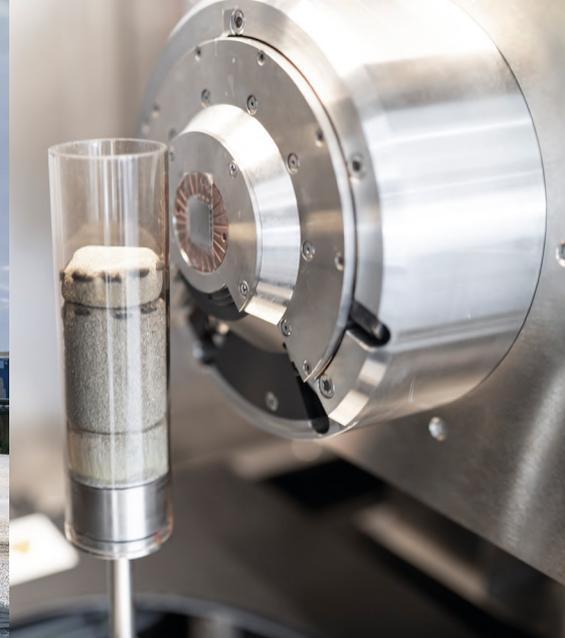
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EVENT CALENDAR

For latest information and details on SPE Germany events visit our website.



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Date	Type	Event	Location
19 Mar 2026	Webinar	Learnings from Türkiye's rapid Geothermal growth	Online
17-19 Mar 2026	Conference	SPE/IADC International Drilling Conference and Exhibition	Galveston, TX, USA
08-10 Apr 2026	Conference	Student Technical Congress (STC) 2026 SPE Europe Regional PetroBowl Competition	Clausthal, Germany
27-30 Apr 2026	Conference	21st Pipeline Technology Conference	Berlin, Germany
4-7 May 2026	Conference	Offshore Technology Conference (OTC) 2026	Houston, TX, USA
6-7 May 2026	Conference	DGMK/ÖGEW Frühjahrstagung 2026	Münster, Germany
9 June 2026	Distinguished Lecture	Carbon Storage Risks and Costs: Busting Perceptions & Myths	Hannover, Germany
19 June 2026	Meeting	GS-SPE Annual meeting	Celle, Germany
23-25 June 2026	Conference	SPE Europe Energy Conference	Istanbul, Türkiye
20-21 July 2026	Conference	SPE Africa Geothermal Workshop	Nairobi, Kenya
15-16 Sep 2026	Conference	Celle Drilling 2026	Celle, Germany
21-22 Oct 2026	Conference	The German Geothermal Congress 2026	Potsdam, Germany
21-23 Oct 2026	Conference	SPE Annual Technical Conference and Exhibition	Houston, TX, USA
2 - 5 Nov 2026	Conference	ADIPEC	Abu Dhabi, UAE
2 - 6 Nov 2026	Conference	EAGE Global Energy Transition Conference	Hannover, Germany

German Section SPE Chairperson Letter

Edna Michelle Bisso Bi Mba, GSSPE Chair & Harbour Energy



Dear SPE colleagues and friends,

Welcome to the Q1-2026 issue of @SPEgermany Newsletter!

Align with SPE's mission to connect our members, disseminate and exchange technical knowledge about the exploration, development and production of oil and gas resources and related energy resources, we kicked off the year with an outstanding Distinguished Lecture by **Matthew Isbell** about Multiparty Technologies Enhancing Drilling Operations Control. The lecture was a deep dive on implementing well construction automation system and on how technology and processes can be deployed to benefit to all stakeholders, reducing operation time and cost. Matthew's presentation was followed by a long and engaging Q&A session, reinforcing the relevance of the topic for our industry. (page 16).

In this issue of the newsletter, we continue our series "The Highlighted GSSPE Member of the Quarter" with an inspiring interview of **Prof. Matthias Reich**, Germany's only professor of deep drilling technology, who officially stepped down from the TU Bergakademie Freiberg. From happy metal guitarist to children's book author, Prof. Reich combines research, teaching and science communication like no other – refer to page 08. We also reflect on the SPE Ambassador Lecture Program which took place in February 2026 at the Technische Universität Clausthal, focusing on career development, technical insights and SPE community engagement (page 15) and the webinar about Challenges on Mittelplate ERD Projects and CCS Policy update in Germany and Europe from December 2026 (page 17). Both events were powered by our dynamic GSSPE Young Professional Committee. On the technical front, we present two papers about "Leanings from Türkiye's Rapid Geothermal Growth" by **Selina Pedrosa** (page 11) and about "Screening Tool for Assessing CO₂ Storage Potential in Ghana" by **Kwaku Kyeremanteng** (page 13).

Moreover, I would like to remind you about the **2026 Student Technical Congress (STC)**, which will take place on April 8-10, 2026 in Clausthal-Zellerfeld. The STC is Germany's leading student event for subsurface engineering and geoscience, bringing together the brightest students from across Europe. The 2026 edition marks the **20th anniversary** of the event, a milestone we will celebrate with the inclusion of the **Regional Petrobowl Competition** into the main Program. Join us as an industry representative at the **#2026STC** and connect with future workforce!

I look forward to seeing you in Clausthal-Zellerfeld!

Enjoy the read,

Edna,
SPE Germany Chairperson



Source: © DEEP.KBB GmbH

Announcement

Beneath the Surface - engineering the future of energy

DGMK/ÖGEW Frühjahrstagung

Date | Venue

06 - 07 May 2026 | Münster

Registration



Organizer

DGMK e.V.
Große Elbstraße 131
22767 Hamburg
www.dgmk.de

Main topics:

- Petroleum Engineering / Production Engineering
- Process Safety / Monitoring / Emission Management
- Brine mining / Lithium
- Geoscience
- H2 Storage / Energy Storage / Underground Storage Technology
- Geothermal Energy
- CC(U)S
- 'Performing while Transforming'
- Digital Transformation / AI
- Drilling Technology / Well Integrity



The highlighted GSSPE Member of the Quarter

Prof Reich, please introduce yourself and your experience briefly

I was born in 1959 in Osterode am Harz. I spent my childhood and school years in Bad Grund, Windhausen, and Osterode — so, except for my military service, always in the vicinity of Clausthal-Zellerfeld, where I eventually pursued my studies.



Figure 1. Prof. Mathias Reich performing at a concert

As a student, I constantly suffered from a chronic lack of money, so I took a student assistant (HiWi) job at the Institute of Drilling Engineering, where I drew lecture slides for Prof. Ghofrani. I graduated in 1986 with a degree (Dipl.-Ing.) in Chemical Engineering.

My first job took me to Lake Constance, where I worked as a development engineer and commissioning engineer for paper manufacturing machines. During a business trip, I happened to come across a job advertisement from a globally leading service company based in Celle. I remembered my HiWi job, applied—and got the position!

For 16 years, I worked at **Baker Hughes**, testing prototypes of innovative drilling and measurement systems on drilling rigs around the world and reporting the results back to the development department. I had offices in Celle, Aberdeen, Stavanger, Bergen, and Houston. I truly enjoyed that time.

Around the year 2000, I sensed an opportunity to take over the professorship in Drilling Technology at **TU Bergakademie Freiberg**. I began pursuing my doctorate part-time, completed it in 2004, and was indeed appointed to TU Freiberg in 2006. There, I taught Drilling Technology for 19 years.

Since October 2025, I have been retired—but I continue to work with great enthusiasm on many projects.

You spent significant time working in the oil and gas industry before moving into academia. How did your experience shape your teaching philosophy and research focus as a Professor of drilling engineering?

My extensive practical experience in the petroleum industry formed the foundation of what I taught at the university. You won't find this kind of knowledge in books in Germany; you have to experience it in real life to convey it properly.

How specialized this field is becomes clear from the fact that, in all of Germany, there is usually only a single university professor for drilling technology.

At the university, I mainly had to learn how to communicate this knowledge as clearly as possible.

My experience as a hobby rock musician helped me with that.

Every lecture felt like a small gig on a state. If it didn't "ignite" the audience I would think about how I could present it better the following year.

Over the 19 years of my teaching career, I believe a fairly effective concept emerged.

In research, I focused primarily on developing more efficient drilling methods for hard rock.

The highlighted GSSPE Member of the Quarter

As a small university institute, we cannot compete with the large development departments of service companies; instead, we have to find niche areas where the “big players” do not yet see a significant market.

What motivated you to write the book *Tiefbohrtechnik*, and how did your combined experience in industry and academia shape the way you structured and presented the subject in the book?

As it became clear that my retirement age was approaching, it was still uncertain whether I would find a successor — and above all, who it would be. I found the thought saddening that my drilling engineering knowledge, accumulated over nearly 40 years, might simply be forgotten in the worst case. Since the last comprehensive book on deep drilling engineering had been released some decades ago, I decided to write down my lecture material and turn it into a new, up-to-date text book.



Figure 2. Prof. Matthias in the field



Figure 3. Selfie at Platform Bohrsinsel

Looking back, it was an incredible effort, but it was worth it. I explained everything exactly as I had done in my lectures, placing the greatest emphasis on clarity and comprehensibility. I believe that is precisely what makes the book stand out.

With drilling playing a role not only in hydrocarbons but also in geothermal energy, how do you see the discipline evolving in the context of Energy Transition, and what competencies future engineers should develop?

Drilling for hydrocarbons does not fundamentally differ from drilling for geothermal energy. Anyone searching for thermal waters in the deep subsurface must also be able to handle hazardous situations in which, for example, gas is encountered unexpectedly. A “geothermal driller” must therefore always also be an “oil and gas driller.”

Here in Germany, priorities are currently shifting. Until a few years ago, the petroleum industry was at the forefront; today, however, the focus has moved more toward deep geothermal energy.

Many professionals working in the deep geothermal sector today previously worked in the petroleum industry. And that is a very good thing, because the same competencies are required in both places.

The highlighted GSSPE Member of the Quarter

What first gave you the idea to start a YouTube channel?

Oh, that was a very crazy story. Our university in Freiberg wanted to introduce more digital teaching. I provocatively asked which of the professors would even be capable of shooting a film, editing it, and putting it online. To demonstrate that such an undertaking would be doomed to fail, I produced the first film in the series and called it “Fun with Drilling Engineering,” (Spaß mit Tiefbohrtechnik) inspired by Sheldon Cooper’s series “Fun with Flags.” I assumed that, in both cases, no one would be seriously interested to watch it!

However, it soon became clear that the professional community was enthusiastic about the format — and in the end, we produced more than 100 episodes.



Figure 4. Youtube Channel “Spaß mit Tiefbohrtechnik”

After filming so many episodes, what is the most important thing you’ve learned about connecting with an audience online?

I completely lost my initial inhibitions about performing in front of running cameras. Today, I no longer care whether someone is filming me, photographing me, simply watching me, or how I look in pictures or sound in audio recordings. That is liberating and makes many things in life easier.



Figure 5. Prof. Matthias presenting

Would you recommend this path (YouTube channel) to other experts and academics, and what is your #1 tip for someone afraid to hit “record”?

It has to “fit”. Some people love working in front of the camera, while others never get used to it. But everyone should try it at least once. The Nobel laureate Feynman is said to have remarked something like “If you can’t explain it simply, you haven’t understood it well enough.” When you try to explain something in a three-minute segment, you often realize that you cannot make it brief and concise. Then you think it through again. Quite often, an unexpected insight suddenly appears — and just like that, you can explain the problem in a few sentences so that anyone can understand it.

The work on my videos also improved my lectures and, in particular, the lecture slides, which ultimately also found their way into my book “Tiefbohrtechnik” (Drilling Engineering).



Figure 6. Prof. Matthias at Institut Bohrtechnik, Freiberg

Written By: Selin Pedrosa

Learnings from Türkiye's Rapid Geothermal Growth

Abstract

This paper examines why geothermal energy scaled rapidly in Türkiye, why this growth model is now under strain, and why future expansion will require more than abundant subsurface resources. Although Türkiye hosts one of the world's most productive geothermal systems, geothermal energy remained marginal for much of the twentieth century as national energy policy favored large hydropower. Rapid expansion only began after post-2001 with electricity market liberalization, which opened generation to private investment and fundamentally reshaped sector incentives.

A central driver of this growth was the Renewable Energy Resources Support Mechanism (YEKDEM), introduced in 2011, which provided long-term feed-in tariffs and significantly reduced revenue risk for capital-intensive geothermal projects. Equally decisive was the role of the General Directorate of Mineral Research and Exploration (MTA), whose decades of publicly funded exploration lowered subsurface uncertainty.

The subsequent auctioning of pre-explored fields following the 2007 Geothermal Law created a distinctive public-private sequencing that accelerated private sector entry. Geothermal development was further enabled by strong engagement from multilateral and domestic financial institutions, alongside substantial technology spillovers from Türkiye's oil and gas sector, which reduced drilling costs and enhanced operational efficiency.

Despite these successes, the sector now faces structural challenges. Development has been geographically concentrated in western Anatolia, exploration activity has slowed since 2018, and fragmented reservoir licensing has led to pressure interference, declining productivity, and underutilized capacity. The paper argues that sustaining geothermal growth in Türkiye will require regulatory refinement, reservoir-based governance, renewed exploration incentives, and financial frameworks aligned with geothermal's long investment horizon.

Read the full paper [here](#)

And join the [webinar](#) on March 19th

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Written By: Kwaku Duah Kyeremanteng, College of Engineering KNUST-Kumasi

A Smart Screening Tool for Assessing the CO₂ Storage Potential of Geological Basins in Ghana

Based on the thesis conducted to fulfill the requirements of the Bachelor's Degree at the College of Engineering KNUST-Kumasi

Carbon Capture, Utilization and Storage (CCUS) is a promising technology for mitigating greenhouse gas emissions and can play a significant role in achieving Ghana's climate goals. Ghana, like other developing countries, needs to design screening criteria for CCUS facilities to ensure that investments in the technology are effective and efficient. This project outlines the key considerations for designing such screening criteria, including the assessment of the technical and economic feasibility of the technology, the identification of potential storage sites, and the evaluation of the social and environmental impacts of CCUS facilities. The proposed screening criteria will enable Ghana to make informed decisions about the deployment of CCUS technology in the country, contributing to the achievement of the country's climate change mitigation goals.

CCS Facility Screener

Field Parameters | Safety and Ecological Criteria | Result

Identity Parameters

Site Name Geological Storage Facility

Formation Reservoir storage coefficient (%)

Depositional Environment

Physical Parameters

	Mean	Standard Deviation
Reservoir thickness (ft)	<input type="text"/>	<input type="text"/>
Reservoir porosity (%)	<input type="text"/>	<input type="text"/>
Reservoir permeability (mD)	<input type="text"/>	<input type="text"/>
Reservoir temperature (K)	<input type="text"/>	<input type="text"/>
Reservoir pressure (MPa)	<input type="text"/>	<input type="text"/>

CCS

Figure 1: A screenshot of the CCS Facility Screener

Read the full article [here](#)

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Written By: Reinel Echavez and Mohamed Eita, YP members

Inspiring Future Energy Leaders: SPE Ambassador Lecture Program at TU Clausthal

On 2nd February, against the picturesque backdrop of the snowy Harz Mountains, the SPE **Ambassador Lecture Program (ALP)** brought energy, insight, and inspiration to Technische Universität Clausthal (TU Clausthal). Hosted by the TU Clausthal SPE Student Chapter, with the support of Society of Petroleum Engineers Germany and SPE Young Professionals, the event proved to be a remarkable success.

The session began with **Reinel Echavez**, who introduced **SPE Young Professionals (YP)** and highlighted how the Society of Petroleum Engineers empowers students and early-career engineers. From global networking opportunities to access to technical resources and structured career development programs, attendees gained valuable insights into how SPE supports their transition from academia to industry.

The spotlight then turned to **Mohamed Eita**, who opened his segment with a creative safety moment inspired by the iconic TV show *Who Wants to Be a Millionaire?*. This engaging start set the tone for a dynamic presentation, as he shared his professional journey—from university life to his current role as Lead Field & Technical Support Engineer – Artificial Lift Systems at **Baker Hughes**.



Figure 1. Event flyer

Before diving into the technical core of the lecture, participants took part in an interactive quiz on Electrical Submersible Pumps (ESP). Demonstrating outstanding technical knowledge, **Oğuzhan Vural** secured first place, showcasing impressive expertise in ESP systems.

Mohamed Eita’s technical presentation covered the working principles, applications, and gas management technologies of

Electrical Submersible Pumps, offering students practical insights into artificial lift systems and production optimization. The lecture drew a strong audience of Bachelor’s, Master’s, and PhD students, along with faculty members from the Institute of Subsurface Energy Systems at TU Clausthal—reflecting the high level of interest in production technology and artificial lift solutions.

I would like to express my appreciation for this valuable event. It was a great learning and networking opportunity for me. Thank you to SPE and all organizers for making this possible.

Oğuzhan Vural

Master student. First-place winner of the interactive quiz.

A special thank you goes to Baker Hughes for sponsoring the event and supporting the next generation of energy professionals. The program concluded with a meet-and-greet session, providing students and young professionals with valuable time to network, exchange ideas, and build meaningful professional connections.

The success of this ALP session once again highlights the importance of collaboration between academia, industry, and professional organizations in shaping the future of the energy sector.



Figure 2. Group picture

Written By: Sven Haberer, Program Chair and Barbara Cortez, Newsletter editor

Distinguished Lecture in Hannover: A Framework Delivers Multiparty Technologies Enhancing Drilling Operations Control

The SPE German Section had our first in person event this year on February 9th, bringing together industry professionals and students at the **Neptune Energy** Deutschland offices in Hannover.

The evening featured a Distinguished Lecture, which is SPE's speaker program of selected industry experts visiting local sections around the world to share technical knowledge and experience. It is one of the most established knowledge-sharing formats in the petroleum engineering community.

The speaker was **Matthew Isbell**, Senior Drilling Engineering Advisor at Hess Corporation, who presented his lecture: "A Framework Delivers Multiparty Technologies Enhancing Drilling Operations Control."

Matt Isbell took us into a deep dive on implementing a well construction automation system, explaining how technology and processes were deployed at scale in a way benefiting all stakeholders. Using this interconnected system allowed to drastically reduce the time and cost of well construction. Matt expanded how this collaborative process could be applied to further areas, allowing independent stakeholders to work together.



Figure 1. During presentation

The lecture opens a long and engaging Q&A session, which reflected that this topic is relevant nowadays and it was well presented.

Networking and Community



Figure 2. In the Restaurant

Beyond the technical content, the evening offered an important opportunity to network between the participants. Following the lecture, the group moved to an Italian restaurant for dinner, a post event tradition that bridges professional and social interaction.

Over the meal, students and professionals got to know each other, discussed different topics and connected. These personal interactions allow our community to grow stronger, ensuring that the next generation of engineers feels supported and inspired by those already leading the field.



Figure 3. In the restaurant

Written By: Reinel Echavez and Hedye Mobaraki, YP members

ERD and CCS Take Center Stage at SPE Germany Young Professionals Webinar



On 10 December 2025, the SPE Germany Young Professionals hosted a well-attended webinar focused on two critical and interconnected topics for the energy industry: **Extended Reach Drilling (ERD) and Carbon Capture and Storage (CCS)**.

The event brought together slightly more than 20 professionals, researchers, and young engineers to discuss how technical field challenges and evolving policy frameworks are shaping the future of energy projects in Germany and Europe.

The webinar featured two expert speakers who offered complementary perspectives from industry operations and policy development.

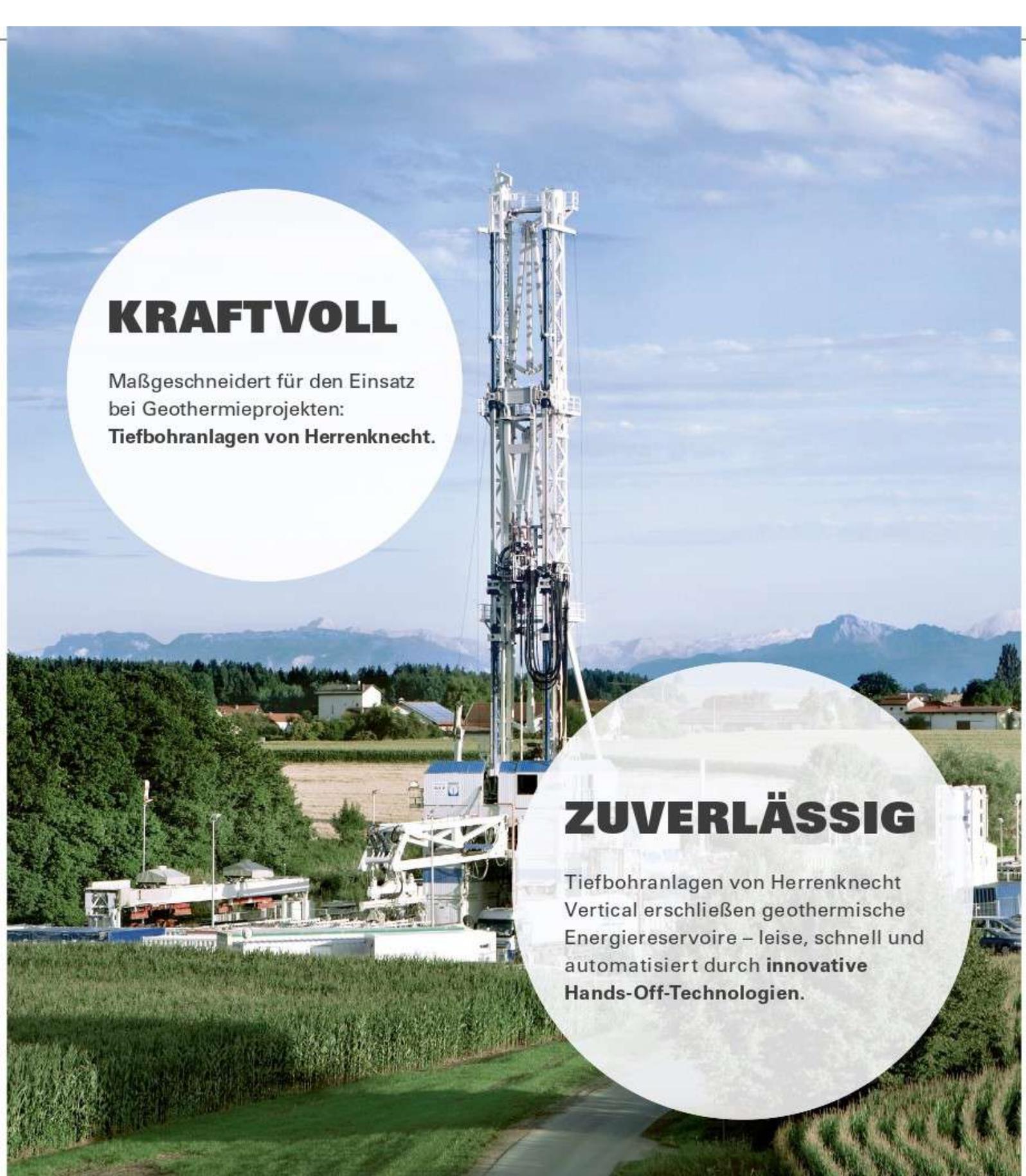
Renas Ibrahim, Senior Drilling Engineer at **Harbour Energy**, opened the session with a technical presentation titled **“ERD Projects’ Challenges on Mittelplate.”** Ibrahim provided practical insights into the operational realities of extended reach drilling. He highlighted how ERD complexity increases significantly with well design, execution constraints, and risk management. His talk emphasized the importance of careful planning, continuous learning, and adaptive execution strategies to ensure safe and efficient operations.

The second presentation shifted the focus to the regulatory environment. **Ludger Radermacher**, Head of Policy, Law, and Markets at **BVEG**, delivered a comprehensive **“CCS Policy Update: Germany & Europe.”** Radermacher outlined the current direction of CCS policy at both national and European levels, explaining how regulatory clarity—or the lack of it—can directly influence project timelines, investment confidence, and deployment pathways.

The session was skillfully moderated by **Hedye Mobaraki**, Research Assistant at TU Clausthal, who facilitated a dynamic discussion and helped bridge the gap between technical engineering challenges and policy considerations.

Among the key takeaways from the webinar was the recognition that technical innovation alone is not sufficient. Successful ERD and CCS projects require close collaboration between industry, academia, and policymakers to reduce uncertainty, manage risks, and accelerate pragmatic energy transition solutions.

The SPE Germany Young Professionals thanked all participants for their active involvement and announced that more events are planned in the near future.



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