E OIL AND GAS LAW REVIEW

SIXTH EDITION

EditorChristopher B Strong

ELAWREVIEWS

E OIL AND GAS LAW REVIEW

SIXTH EDITION

Reproduced with permission from Law Business Research Ltd This article was first published in October 2018 For further information please contact Nick.Barette@thelawreviews.co.uk

Editor Christopher B Strong

ELAWREVIEWS

PUBLISHER Tom Barnes

SENIOR BUSINESS DEVELOPMENT MANAGER Nick Barette

BUSINESS DEVELOPMENT MANAGERS
Thomas Lee, Joel Woods

SENIOR ACCOUNT MANAGER
Pere Aspinall

ACCOUNT MANAGERS

Jack Bagnall, Sophie Emberson, Katie Hodgetts

PRODUCT MARKETING EXECUTIVE Rebecca Mogridge

RESEARCHER Keavy Hunnigal-Gaw

EDITORIAL COORDINATOR
Gavin Jordan

HEAD OF PRODUCTION Adam Myers

PRODUCTION EDITOR Martin Roach

> SUBEDITOR Janina Godowska

CHIEF EXECUTIVE OFFICER
Paul Howarth

Published in the United Kingdom by Law Business Research Ltd, London 87 Lancaster Road, London, W11 1QQ, UK © 2018 Law Business Research Ltd www.TheLawReviews.co.uk

No photocopying: copyright licences do not apply.

The information provided in this publication is general and may not apply in a specific situation, nor does it necessarily represent the views of authors' firms or their clients. Legal advice should always be sought before taking any legal action based on the information provided. The publishers accept no responsibility for any acts or omissions contained herein. Although the information provided is accurate as of October 2018, be advised that this is a developing area.

Enquiries concerning reproduction should be sent to Law Business Research, at the address above.

Enquiries concerning editorial content should be directed to the Publisher – tom.barnes@lbresearch.com

ISBN 978-1-912228-65-2

Printed in Great Britain by Encompass Print Solutions, Derbyshire Tel: 0844 2480 112

ACKNOWLEDGEMENTS

The publisher acknowledges and thanks the following law firms for their learned assistance throughout the preparation of this book:

AB & DAVID

ALLIANI & BRUZZON

AMERELLER LEGAL CONSULTANTS

BIRD & BIRD LLP

CUATRECASAS

DLA PIPER WEISS-TESSBACH GMBH

EVERSHEDS SUTHERLAND (INTERNATIONAL) LLP

FITZWILLIAM, STONE, FURNESS-SMITH & MORGAN

GIDE LOYRETTE NOUEL

GORRISSEN FEDERSPIEL

HOLLAND & KNIGHT

HUNTON ANDREWS KURTH LLP

J SAGAR ASSOCIATES

KVALE ADVOKATFIRMA DA

MATTOS FILHO, VEIGA FILHO, MARREY JR E QUIROGA ADVOGADOS

MCCARTHY TÉTRAULT LLP

MINTERELLISON RUDDWATTS

OMV AKTIENGESELLSCHAFT

ORRICK, HERRINGTON & SUTCLIFFE

PRIMERA AFRICA LEGAL

SÁNCHEZ DEVANNY

VIEIRA DE ALMEIDA
VINSON & ELKINS LLP

ZHONG LUN LAW FIRM

CONTENTS

PREFACE		V11
Christopher B	Strong	
Chapter 1	ABU DHABI	1
	James Comyn and Patricia Tiller	
Chapter 2	ALGERIA	9
	Samy Laghouati and Djamila Annad	
Chapter 3	ARGENTINA	19
	Pablo Alliani and Fernando Brunelli	
Chapter 4	AUSTRIA	34
	Manfred Fürnkranz, Andreas Gunst, Oskar Winkler, Kenneth Wallace-Müller and	
	Christoph Schimmer	
Chapter 5	BRAZIL	43
	Giovani Loss, Felipe Feres and Nilton Mattos	
Chapter 6	CANADA	54
	Cameron T Hughes, Curtis Merry and Niki Gill	
Chapter 7	CHINA	65
	Jihong Wang, Ying Liu, Anjing Wu, Huiqi Zhao and Guanli Huang	
Chapter 8	COLOMBIA	77
	José V Zapata Lugo and Claro M Cotes Ricciulli	,
Chapter 0	DEMOCRATIC REPUBLIC OF THE CONGO	00
Chapter 9	Olivier Bustin and Luiza Savchenko	90
Chapter 10	DENMARK	99
	Michael Meyer	

Contents

Chapter 11	FRANCE	112
	Yves Lepage and Geoffroy Berthon	
Chapter 12	GERMANY	121
	Matthias Lang and Laura Linde	
Chapter 13	GHANA	135
	Ferdinand Adadzi and Nana Serwah Godson-Amamoo	
Chapter 14	GREENLAND	152
	Michael Meyer	
Chapter 15	INDIA	161
	Venkatesh Raman Prasad	
Chapter 16	IRAQ	176
	Christopher B Strong	
Chapter 17	IRAQI KURDISTAN	187
	Florian Amereller and Dahlia Zamel	
Chapter 18	MEXICO	202
	José Antonio Postigo-Uribe, Guillermo Villaseñor-Tadeo and Tania Elizabeth Trejo-Galv	ez
Chapter 19	NEW ZEALAND	213
	Paul Foley	
Chapter 20	NIGERIA	228
	Israel Aye, Laura Alakija and Ogbongbemi Aminu	
Chapter 21	NORWAY	241
	Yngve Bustnesli	
Chapter 22	PORTUGAL	254
	André Duarte Figueira, Diogo Ortigão Ramos, Lourenço Vilhena de Freitas and	
	João Sequeira Sena	
Chapter 23	RUSSIA	268
	Natalya Morozova and Rob Patterson	

Contents

Chapter 24	TRINIDAD AND TOBAGO	280
	Jon Paul Mouttet, Lesley-Ann Marsang and Simonne Jaggernauth	
Chapter 25	UNITED KINGDOM Jason Lovell, Jubilee Easo and Chris Pass	291
Appendix 1	ABOUT THE AUTHORS	305
Appendix 2	CONTRIBUTING LAW FIRMS' CONTACT DETAILS	323

PREFACE

2018 has been a transitional period for the international oil and gas industry.

With the industry enduring a fourth straight year of low oil prices, and with no prospects for a significant increase in sight, participants in the industry have been forced to adapt. Oil companies must continue to be disciplined, allocating scarce capital only to their best prospects, and shelving less promising projects for future years. Some in the industry have already started to worry that by reducing capital expenditures the seeds of a future price shock are being sown.

Oil-producing countries have been in a similar pinch. Having become accustomed to triple-digit oil prices, the 'new normal' of US\$50 oil has produced a grim budgetary reality. Producing countries that had only recently tightened fiscal terms in response to high oil prices must now considering loosening them again in order to attract investment. In Saudi Arabia, the world's largest producer, plans are afoot to sell a minority stake in the company to foreign investors in order to raise cash to diversify the country's economy, a move that would have been unthinkable a few years ago.

Yet amid the ongoing turbulence there are opportunities. The necessity for existing companies (many of which are over-leveraged and cash strapped) to offload parts of their portfolios will create opportunities for new, leaner competitors to arise. US shale producers, whom many were prepared to write off in the low oil price environment, have made dramatic improvements in efficiency and learned to calibrate their acreage to different oil price environments, focusing on their richest prospects when prices are low and adding lower-value opportunities as prices escalate. Among the major oil exporting countries, low oil prices have provided the impetus for long-needed structural reforms to diversify their economies beyond the extraction of petroleum.

The international oil and gas industry has always been cyclical. Although the last three years have been eventful, they are by no means the first downturn the industry has faced, nor the last. I have no doubt that the years ahead will continue to present challenges and opportunities for practitioners in this most dynamic of industries.

As always, I would like to thank our contributing authors for their outstanding contributions to this year's edition of *The Oil and Gas Law Review* and also the publishers at Law Business Research for their tireless work in bringing this all together.

Christopher B Strong

Vinson & Elkins LLP London October 2018

Chapter 12

GERMANY

Matthias Lang and Laura Linde¹

I INTRODUCTION

Germany produces little domestic oil and natural gas and relies heavily on imports. In 2017, only 2 per cent of oil and 7 per cent of natural gas were produced domestically while the rest of it had to be imported to cover domestic oil and gas consumption.² Crude oil is mainly imported from Russia, Norway and European Union Member States.³ Natural gas comes mainly from Russia, Norway and the Netherlands.⁴

Annual domestic oil and gas production has been declining steadily. In 2017, annual oil production amounted to 2.2 million metric tons, which represents a decline of about 6 per cent from 2016 levels while production of natural gas declined by about 8 per cent and amounted to 7.3 billion cubic metres.⁵ On 1 January 2018, Germany had proved and probable reserves of about 28.3 million metric tons of oil and 63.1 billion cubic metres of gas.⁶ Active drilling activities have been cut by half, down to four exploration wells, while the number of field development wells has increased to 20 compared to 18 in 2016.⁷

¹ Matthias Lang is a partner at Bird & Bird LLP. The author would like to thank Laura Linde, formerly a trainee at the firm and now at the Berlin Court of Appeal, for her contribution to this chapter.

State Authority for Mining, Energy and Geology, Annual Report on Oil and Gas in Germany (2017), available at https://www.lbeg.niedersachsen.de/erdoel-erdgas-jahresbericht/jahresbericht-erdoel-und-erdgas-in-der-bundesrepublik-deutschland-936.html (last visited 16 July 2018), pp. 43, 51.

³ Federal Ministry for Economic Affairs and Energy, Oil Imports and Crude Oil Production in Germany, available at https://www.bmwi.de/Redaktion/EN/Artikel/Energy/mineraloel-oelimporte-und-rohoelproduktion-in-deutschland.html (last visited 16 July 2018).

⁴ Federal Ministry for Economic Affairs and Energy, Instruments Used to Secure Gas Supply, available at https://www.bmwi.de/Redaktion/EN/Artikel/Energy/gas-instrumente-zur-sicherung-der-versorgung.html (last visited 22 July 2018).

⁵ Federal Association of German Gas, Oil and Geothermal Energy, Numbers and Facts, available at http://www.bveg.de/Erdgas/Zahlen-und-Fakten (last visited 16 July 2018).

⁶ State Authority for Mining, Energy and Geology, Annual Report on Oil and Gas in Germany (2017), available at https://www.lbeg.niedersachsen.de/erdoel-erdgas-jahresbericht/jahresbericht-erdoel-und-erdgasin-der-bundesrepublik-deutschland-936.html (last visited 16 July 2018), pp. 38.

State Authority for Mining, Energy and Geology, Annual Report on Oil and Gas in Germany (2017), available at https://www.lbeg.niedersachsen.de/erdoel-erdgas-jahresbericht/jahresbericht-erdoel-und-erdgasin-der-bundesrepublik-deutschland-936.html (last visited 16 July 2018), p. 10.

Onshore oil and natural gas fields are mainly located in the northern part of Germany. More than 90 per cent of domestic gas and around one third of crude oil production and reserves are located in the federal state of Lower Saxony.8 Germany's only two offshore oil and gas fields are located in the North Sea.9

Since around 1980, German energy policy has aimed to transition from conventional fossil fuels towards renewable energy sources. By launching the *Energiewende* (energy transition), Germany is reducing its dependency on oil and gas imports. However, while the legislature establishes necessary conditions to encourage investments into renewable resources, conventional energy sources like oil and natural gas ensure a secure energy supply to cover domestic needs.

A framework of mining laws covers the extraction of oil and gas and sets out requirements for a number of issues such as licensing, health and safety, environmental protection, compliance and monitoring. With regard to the use of unconventional fracking methods, a legislative package was adopted in February 2017 to impose a *de facto* prohibition on hydraulic fracking while also tightening requirements on conventional fracking methods.

II LEGAL AND REGULATORY FRAMEWORK

i Domestic oil and gas legislation

The central legislative act regulating the exploration of oil and gas is the Federal Mining Act of 1980. European legislation on licensing, environment, health and safety was transposed into national law by amending the Federal Mining Act and by creating the Federal General Mining Ordinance of 1995. The Federal Mining Act is further accompanied by a number of ordinances on technical and procedural issues such as the Health and Safety Mining Ordinance and the Ordinance on Environmental Impact Assessments of Mining Projects.

The Federal Mining Act aims at ensuring availability of raw materials by effectively managing and promoting exploration, extraction and processing of mineral resources through licencing and approval procedures. The Act safeguards raw materials by prioritising the extraction of raw materials over other public interests and by providing that conflicting public law should be applied only to the extent that exploration and extraction are impaired as little as possible.¹⁰

The Federal Mining Act also aims to ensure the safety of mining operations and employees and to strengthen precautions against risks to human life, health, equipment and materials.¹¹

⁸ State Authority for Mining, Energy and Geology, Oil and Gas – Duties and Activities, available at https://www.lbeg.niedersachsen.de/energie_rohstoffe/erdoel_und_erdgas/erdoel-und-erdgas---aufgabenund-taetigkeiten-762.html (last visited 16 July 2018).

⁹ Federal Ministry for Economic Affairs and Energy, Offshore Production of Oil and Natural Gas, available at https://www.bmwi.de/Redaktion/DE/Artikel/Industrie/gewinnung-heimischer-rohstoffe-offshoregewinnung-04.html (last visited 16 July 2018).

Section 48 Federal Mining Act. An English translation is available at http://www.gesetze-im-internet.de/englisch_bbergg/englisch_bbergg.html#p0016. Please note that this translation is not binding and may not reflect the latest legislative changes.

¹¹ Section 1 No. 2 and 3 Federal Mining Act.

ii Regulation

The requirements on licensing, health, safety and environmental protection are implemented and enforced through administrative acts as well as through compliance and monitoring mechanisms. While the Federal Mining Act is a federal law, the respective competent authorities of the federal states have the power to enforce the provisions of the Federal Mining Act. ¹² Federal authorities only have the power to enforce mining laws in the area of the continental shelf. ¹³

The competent authorities of the federal states in which mining activities take place can grant exploration and extraction licences. The licences entitle the holder to explore for and extract resources specified in the licence. Details and requirements to apply for such a licence may differ somewhat between the respective authorities in the different federal states. The application process may in practice also be delayed or accelerated depending on the specific political situation.

Mining authorities should approve the operating plan that the mining operator has to prepare in order to carry out the specified exploration or extraction. The approval procedure includes the assessment of the proposed measures with regards to safety and protection of workers, protection of the surface and prevention of damage to the public interest. The authorities also monitor compliance with the mining law provisions and may issue implementation measures to prevent risks. To further enforce the provisions of the Federal Mining Act the authorities can impose fines or penalties.

iii Treaties

Germany has entered into numerous multilateral and bilateral treaties on dispute resolution and trade liberalisation. Germany is also a party to double taxation treaties with more than 100 countries.

Germany is a contracting party to the Energy Charter Treaty. The Treaty aims at establishing a framework for energy security on the basis of open, competitive markets and sustainable development. Germany is also a contracting party to major trade liberalisation and investment protection agreements, such as the General Agreement on Tariffs and Trade (GATT), the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards of 1958 or the International Centre for Settlement of Investment Disputes Convention of 1965.

Germany is a Member State of the European Union and, therefore, also subject to the legal framework of the Union. Consequently, Germany is part of the European internal gas market as well as of the Energy Union, which the European Union's Third Energy Package from 2009 established. Further, the Regulation on wholesale energy market integrity and transparency (REMIT)¹⁵ is directly applicable in Germany. The Regulation aims at identifying and penalising abusive practices in wholesale energy markets and has a direct effect on participants of the German gas market.¹⁶

¹² Section 142 Federal Mining Act.

¹³ Sections 132 and 134 Federal Mining Act.

¹⁴ International Energy Charter, The Energy Charter Treaty, available at www.energycharter.org/process/ energy-charter-treaty-1994/energy-charter-treaty/ (last visited 14 September 2017).

¹⁵ Regulation (EU) No. 1227/2011.

¹⁶ Article 1(1) Regulation (EU) No. 1227/2011.

The European Union has also entered into the Comprehensive Economic and Trade Agreement (CETA) with Canada aiming to liberalise trade by reducing tariff barriers and establishing rules on investment protection. CETA provisionally entered into force on 21 September 2017, but before the provisions of CETA can take effect in the European Member States their national parliaments still have to approve the agreement.¹⁷

III LICENSING

Licensing of mining activities follows the principle of first come, first served. Old exploration and extraction rights or agreements as well as mining proprietorship concluded before the Federal Mining Act entered into force remained in force. ¹⁸ Mines, mining concessions and other special rights regarding exploration and extraction of resources effective at the time the Federal Mining Act entered into force were also maintained.

In principle, the authorisation process for licensing follows a two-step procedure. First, the interested party has to apply for an exploration licence or extraction licence to explore and extract mineable resources. Applying for mining proprietorship is also possible. Mining proprietorship grants the same exclusive rights as the extraction licence, but in addition it extends to a right equivalent to a property right. Provisions of the German Civil Code on real property, therefore, apply to the ownership of mining proprietorship. To apply for mining proprietorship, the applicant must be in possession of an extraction licence for the resources and the field in question.

The application for exploration and extraction licences or mining proprietorship has to be made in writing to the competent authority.²¹ The application shall include *inter alia* specifications of the exact resource to be explored or extracted and detailed specifications of the mining area.²²

The Federal Mining Act differentiates between 'freehold mineral resources' and 'freely mineable resources', which can be explored and extracted. Freehold mineral resources are defined as the property of the landowner, whereas land-ownership does not extend to freely mineable resources.²³ Freely mineable resources include hydrocarbons and any gases generated during the extraction process.²⁴ The general principle is that an exploration licence is required for exploring freely mineable resources and an extraction licence or mining proprietorship is required for extracting such resources.²⁵

However, neither the exploration licence nor the extraction licences by themselves entitle the holder to actually conduct exploration or extraction activities. Actual exploration and extraction can only be carried out in accordance with an operating plan developed by

Press Release, EU-Canada trade agreement enters into force (20 Sep 2017), available at http://trade.ec.europa.eu/doclib/press/index.cfm?id=1723.

¹⁸ Section 149 Federal Mining Act.

¹⁹ Section 9(1) Federal Mining Act.

²⁰ Section 13 No. 1 Federal Mining Act.

²¹ Section 10 Federal Mining Act.

²² Section 11 No. 1 and 2 Federal Mining Act.

²³ Section 3(2) Federal Mining Act.

²⁴ Section 3(3) Federal Mining Act.

²⁵ Section 6 Federal Mining Act.

the mining operator and approved of by the competent mining authority.²⁶ The second step for the authorisation of mining activities is, therefore, the approval of the operating plan for a specific mining activity by the competent authority.

There are four types of operating plans: (1) the framework operating plan; (2) the main operating plan, which is valid for a two-year term; (3) the special operating plan; and (4) the mine closure operating plan.²⁷ The plans cover mining activities from the beginning of exploration up to the rehabilitation of the used lands after mining activities have been terminated. The mining operator is responsible for developing the operating plan and specifying necessary measures for operational safety of workers, preventing damage to resources whose protection is in the public interest, protecting the surface and providing for preparatory measures to restore usability of the site after mining activities have been terminated.²⁸

The duration of an exploration licence is limited to a maximum of five years.²⁹ An extension for an additional three years can be granted if the exploration field could not be sufficiently explored despite ordinary and coordinated extraction. Extraction licences can be granted for periods that are appropriate for extraction in the individual case, but 50 years may only be exceeded if necessary for such investments ordinarily required for extraction.³⁰

The competent mining authority can deny an exploration licence on the grounds that the applicant has failed to present a realistic work programme that is adequate in type, scope, purpose and duration for the planned mining operations.³¹ Furthermore, the applicant has to be reliable and the licence will be denied if he or she cannot provide evidence that he or she has sufficient funds to carry out the intended mining activity or if the mining activity would impair resources whose protection is in the public interest or if overriding public interests exclude exploration and extraction within the entire licence area.³²

Extraction licences can be denied on additional grounds: (1) if the coordinates and depth of the mining site are not exactly specified and marked in a map; (2) if the applicant cannot prove that the location and characteristics of the resources permit their extraction; or (3) the technology and facilities required are adequate for the extraction within an appropriate time frame.³³

Exploration and extraction licences can be revoked if events occur after the granting of the licence that would have resulted in the denial of the licence in the first place.³⁴ An exploration licence can also be revoked if exploration has not commenced one year after the license was granted due to reasons the licence holder is responsible for or if scheduled exploration is interrupted for more than one year.³⁵ For extraction licences, the time frame to commence extraction operations is three years before the licence can be revoked. However,

²⁶ Section 51(1) Federal Mining Act.

²⁷ Sections 52 and 53, Federal Mining Act.

²⁸ Section 55 Federal Mining Act.

²⁹ Section 16(4) Federal Mining Act.

³⁰ Section 16(5) Federal Mining Act.

³¹ Section 11 No. 3 Federal Mining Act.

³² Section 11 No. 7, 9 and 10 Federal Mining Act.

³³ Section 12(1) Federal Mining Act.

³⁴ Section 18(1) Federal Mining Act.

³⁵ Section 18(2) Federal Mining Act.

this does not apply if a later start of extraction is necessary for economic or technical reasons.³⁶ Exploration or extraction licences can also be revoked partially or entirely at the request of the licence holder.³⁷

IV PRODUCTION RESTRICTIONS

Generally, there are no specific restrictions on oil and gas production in Germany. However, production restrictions can arise from environmental laws. Water and nature preservation laws prohibit the use of conventional fracking in water and mineral spring protection areas or lake and well regions for public drinking-water supply³⁸ as well as in specified nature reserves.³⁹

As Germany is an import nation for oil and gas, there are no restrictions, as such, on oil and gas exports. There are also no specific requirements for sales of production into local markets. The Federal Oil Stock Act may order that oil stocks are maintained at an amount corresponding to 90 days of average daily net imports in order to ensure a secure domestic supply of oil.⁴⁰

Although not a restriction as such, the general tax regime applies to oil and gas sales into local markets. Oil and gas prices are not subject to specific price setting laws, but rather are determined pursuant to market forces.

V ASSIGNMENTS OF INTERESTS

The Federal Mining Act specifies requirements for the transfer of mining rights. Exploration and extraction licences can be transferred and passed on to a third party, subject to the consent of the competent mining authority.⁴¹ Consent shall be provided in writing and can be denied, for example, if facts give reason to believe that the mining operator is unreliable or that he or she does not have sufficient funds to carry out the mining operation or if overriding public interests prohibit the exploration or extraction.⁴²

Subject to the approval of the competent mining authority, mining proprietorship can be sold to a third party in accordance with provisions of the German Civil Code on the law of obligations. Approval can only be denied if the sale is not in the public interest. If the legal transaction requires a notarial recording, approval can be granted prior to the recording. Approval is considered granted if permission was not denied within two months of receipt of the request for permission.

There is generally no payment required and the government has no first right of first refusal or preferential purchase rights in the event of a transfer.

³⁶ Section 18(3) Federal Mining Act.

³⁷ Section 19(1) Federal Mining Act.

³⁸ Section 13a(1) No. 2 Federal Water Act.

³⁹ Section 33(1a) Federal Nature Conservation Act.

⁴⁰ Section 3(1) Federal Oil Stock Act.

⁴¹ Section 22(1) Federal Mining Act.

⁴² Section 22(1) Federal Mining Act.

⁴³ Section 23(1) Federal Mining Act.

⁴⁴ Section 23(2) Federal Mining Act.

⁴⁵ Section 23(2) Federal Mining Act.

VI TAX

The Federal Mining Act contains specific provisions on royalties for the extraction of mineral resources. The standard percentage for mining royalties is set at 10 per cent of the average attainable market value.⁴⁶ The governments of the federal states can issue ordinances to reduce or raise the percentage in five cases: (1) if this is required to prevent an overall economic imbalance; (2) if required to prevent risk to the competitive position of the exploration or extraction companies; (3) if required to ensure the supply of raw materials to the market; (4) if required to improve the utilisation of deposits for protecting other national economic interests; or (5) as long as the resources are used in the extraction process.⁴⁷ Apart from royalties, taxes for the mining industry in Germany are principally subject to general provisions of German tax and revenue laws.

Other specific domestic taxes relate to the consumption of oil and gas products. The German Energy Tax Act, which implements the European Energy Tax Directive 2003/96/EC, provides for domestic consumption tax on heating oil as well as for fuels used in the transportation sector. The Energy Tax Act also contains specific tax exemptions for fuels used for the production of oil and gas.⁴⁸

VII ENVIRONMENTAL IMPACT AND DECOMMISSIONING

i Environmental impact assessment

An environmental impact assessment is required for commercial oil and gas production if the extracted daily amount exceeds 500 tonnes of oil or 500,000 cubic metres of natural gas.⁴⁹ It is likewise required for the construction and operation of production platforms within coastal waters and the continental shelf.⁵⁰ The use of hydraulic fracking for exploration and extraction of oil and gas as well as for scientific purposes also requires an environmental impact assessment.⁵¹

If the planned mining operation requires an environmental impact assessment, the mining operator has to set up a framework operating plan that is subject to the approval of the competent mining authority.⁵² Details of the approval procedure are specified in the German Administrative Procedure Act. The approval procedure serves the purpose of taking the interests of affected parties and ecosystems into account early, even before the extraction of resources begins.

Environmental impacts also have to be taken into account when a mining operation is terminated. The termination of mining operations requires the mining operator to set out a closure plan that must include details of the technical execution and duration of the planned termination of mining operations.⁵³ An operating log must accompany the closure plan

⁴⁶ Section 32(2) Federal Mining Act.

⁴⁷ Section 32(2) No. 3 Federal Mining Act.

⁴⁸ Section 26 Energy Tax Act.

⁴⁹ Section 1 No. 2 Ordinance on Environmental Impact Assessment for Mining Projects.

⁵⁰ Section 1 No. 2b Ordinance on Environmental Impact Assessment for Mining Projects.

⁵¹ Section 1 No. 2a Ordinance on Environmental Impact Assessment for Mining Projects.

⁵² Section 52(2a) Federal Mining Act.

⁵³ Section 53(1) Federal Mining Act.

setting out a geological description of the deposit and an inventory of resources, including mine dumps, as well as a description of the treatment facilities and any available chemical analysis.⁵⁴

The mining operator is also required to specify details in the closure plan to ensure that necessary precautions to protect human health or life are taken, that resources whose protection is in the public interest will not be impaired and that the surface will be protected with respect to personal safety and the public interest.⁵⁵ Further, it must be ensured that any waste resulting from operations is properly used or removed and preparatory measures for restoring usability of the surface have been taken.⁵⁶ If a closure plan is developed for a mining area on the continental shelf or in coastal waters, damaging effects on the ocean have to be kept to an absolute minimum.⁵⁷

ii Conventional and unconventional fracking methods

In Germany, a difference is made between 'conventional' and 'unconventional' fracking methods. Conventional fracking has been used in Germany since the 1960s to extract natural gas from sandstone rock formations. About one-third of the country's natural gas production comes from this proven method of natural gas extraction. ⁵⁸ Unconventional fracking refers to the extraction of natural gas from clay, shale, marl and coal formations. ⁵⁹ As opposed to the long-term experience with conventional fracking, there has been no long-term experience with unconventional fracking in Germany so far. ⁶⁰

Unconventional fracking technologies are politically controversial in Germany, particularly with regard to safe drinking water and environmental protection. The discussion is often focused on dangers and risks associated with the use of unconventional fracking methods with little regard for potential benefits. A legislation package, adopted in February 2017, ensures the protection of the environment, health and other interests of those affected by unconventional fracking methods. The legislation also transposes European requirements for safety and environmental standards into Germany's national laws.

The legislation mainly includes amendments to the Federal Water Act, the Federal Nature Conservation Act, the Federal Mining Act and the Ordinance on Environmental Impact Assessment for Mining Projects. The amendments tighten existing requirements in mining and water laws to provide for a better protection of drinking water and health. All fracking projects relating to the exploration of oil and gas, regardless of the depth of the extraction project, are subject to an environmental impact assessment.⁶¹

⁵⁴ Section 53(2) Federal Mining Act.

⁵⁵ Section 55(1) No. 3 to 5 Federal Mining Act.

⁵⁶ Section 55(1) No. 6 and 7 Federal Mining Act.

⁵⁷ Section 55(1) No. 13 Federal Mining Act.

⁵⁸ Federal Government, 'No Fracking in Germany' (13 February 2017), available at https://www.bundesregierung.de/Content/EN/StatischeSeiten/Schwerpunkte/Nachhaltigkeit/2016-07-08-frackinggesetz_en.html.

⁵⁹ Federal Government, 'No Fracking in Germany' (13 February 2017), available at https://www. bundesregierung.de/Content/EN/StatischeSeiten/Schwerpunkte/Nachhaltigkeit/2016-07-08-fracking-gesetz_en.html.

⁶⁰ Federal Ministry of Economic Affairs and Energy, Key Factors for a Secure Energy Supply, available at https://www.bmwi.de/Redaktion/EN/Dossier/conventional-energy-sources.html (last visited 12 September 2017).

⁶¹ Section 1 No. 2a Ordinance on Environmental Impact Assessment for Mining Projects.

The fracking legislation package contains tighter requirements for conventional fracking methods. The legislation prohibits conventional fracking projects in water and mineral spring protection areas and lake or well regions for public drinking-water supply⁶² as well as in specified nature reserves.⁶³

Unconventional fracking is prohibited in shale, marlstone, clay rock and coal seam rock formations until 2021.⁶⁴ After this date, the German parliament has to decide whether the prohibition shall remain in place. Unless Parliament takes specific action, the prohibition will remain in place.⁶⁵ However, four test drillings are allowed nationwide for scientific purposes only, and they require the approval of the government of the respective federal state in which the fracking project shall take place.⁶⁶ So far, no test drillings have been approved. However, the German Federal Council has established an independent expert commission that shall issue reports on the test drillings in June 2018.⁶⁷ This may be seen as a sign for the first drillings to be approved soon. The establishment of the expert commission has fuelled the discussion about the environmental risks of fracking, and opponents have called for a complete fracking ban.⁶⁸ It, therefore, remains to be seen when the first test drillings will be carried out and what kind of implications they will have on the discussion about fracking and further restrictions on water and nature-preservation laws.

VIII FOREIGN INVESTMENT CONSIDERATIONS

i Establishment

As Germany is a Member State of the European Union, establishment of nationals of other EU Member States is not restricted under the fundamental principle of freedom of establishment.⁶⁹ Neither are foreign investors from a member country of the European Free Trade Association (EFTA – including the non-EU Member States Iceland, Liechtenstein, Norway and Switzerland) subject to any restrictions regarding establishment or investments.

Foreign investors from non-EFTA countries are subject to restrictions and obligations as set out in the Foreign Trade and Payments Act⁷⁰ and the Foreign Trade and Payments Ordinance⁷¹. Restrictions and obligations can be imposed on investors from non-EFTA countries if the acquisition of domestic companies endangers public order or security or if

⁶² Section 13a(1) No. 2 Federal Water Act.

⁶³ Section 33(1a) Federal Nature Conservation Act.

⁶⁴ Section 13a(1) No. 1 Federal Water Act.

⁶⁵ Federal Government, 'No Fracking in Germany', available at https://www.bundesregierung.de/Content/ EN/StatischeSeiten/Schwerpunkte/Nachhaltigkeit/2016-07-08-fracking-gesetz_en.html (last visited 12 September 2017).

⁶⁶ Section 13a(2) Federal Water Act.

⁶⁷ Section 13a(6) Federal Water Act; Federal Council, Protocol 19/38 (13 June 2018), available at http://dip21.bundestag.de/dip21/btp/19/19038.pdf, p. 3738.

⁶⁸ See, for example, press statement Member of Parliament Julia Verlinden (21 May 2018), available at https://julia-verlinden.de/presse/pressestatements/statements-detail/article/bundesregierung_bereitet_den_ weg_fuer_mehr_riskantes_fracking/.

⁶⁹ Article 49 Treaty on the Functioning of the European Union.

An English translation is available at https://www.gesetze-im-internet.de/englisch_awg/englisch_awg.html.

Please note that this translation is not binding and may not reflect the latest legislative changes.

⁷¹ An English translation is available at www.gesetze-im-internet.de/englisch_awv/englisch_awv.html. Note that this translation is not binding and may not reflect the latest legislative changes.

there is an actual and sufficiently serious danger to a fundamental interest of society.⁷² Further restrictions can be imposed on foreign investments if vital needs in (parts of) Germany need to be secured to protect health and life of human beings.⁷³

In July 2017, the German government amended the legislation on foreign investments by amplifying the veto right of the Federal Ministry of Economic Affairs and Energy. The amendment includes an extension of the power of the Federal Ministry of Economic Affairs and Energy to examine whether public order or security is endangered if a non-EU resident acquires a domestic company or directly or indirectly participates in a domestic company.⁷⁴ The Ministry already examines acquisitions in which a foreign investor acquires at least 25 per cent of the voting rights in the domestic company.⁷⁵ The legislative amendment now extends and specifies the examination right to specific entities, such as operators of critical infrastructure, which includes the oil and gas sector.⁷⁶ It remains to be seen how the extension of the veto right will affect foreign investments in the German oil and gas industry. In any event, the examination right will be applied on a case-by-case basis, and so far, the Federal Ministry of Economic Affairs and Energy has not exercised its veto right.

Foreign investment could also face restrictions subsequent to secondary, extraterritorial effects of US sanctions on Iran and on any company using the dollar or involved in the US market. The impact of these sanctions on Germany, especially of those coming into force in November and curbing Iranian energy exports remain to be seen, as negotiations are still ongoing.

ii Capital, labour and content restrictions

Freedom of capital movement⁷⁷ and freedom of movement for workers⁷⁸ are fundamental EU principles that generally allow workers and capital to move unrestricted between EU Member States. However, workers from EU Member States have to comply with domestic reporting obligations. The Act on the Residence, Economic Activity and Integration of Foreigners in the Federal Territory provides that non-EU workers may be granted a residence title for the purpose of taking up employment if the Federal Employment Agency granted its approval.⁷⁹ The Federal Employment Agency can impose specified restrictions on the residence title.

Non-EU members are subject to reporting requirements relating to assets of a domestic company in which a foreign national participates or that is dependent on several commercially associated foreigners or on assets of domestic branches and permanent establishments of foreign companies. The asset reports shall be submitted once a year to the German Central Bank by electronic means. But the companies of the submitted once a year to the German Central Bank by electronic means.

⁷² Section 5(2) Foreign Trade and Payments Act.

⁷³ Sections 5(4) and 4(1) No. 5 Foreign Trade and Payments Act.

⁷⁴ Section 55(1) Foreign Trade and Payments Ordinance.

⁷⁵ Section 56 Foreign Trade and Payments Ordinance.

⁷⁶ Section 55(1) No. 1 Foreign Trade and Payments Ordinance.

⁷⁷ Article 63 Treaty on the Functioning of the European Union.

⁷⁸ Article 45 Treaty on the Functioning of the European Union.

⁷⁹ Section 18(2) Act on the Residence, Economic Activity and Integration of Foreigners in the Federal Territory. An English translation is available at https://www.gesetze-im-internet.de/englisch_aufenthg/ englisch_aufenthg.html. Please note that this translation is not binding and may not reflect the latest legislative changes.

⁸⁰ Section 65 Foreign Trade and Payments Ordinance.

⁸¹ Sections 71(2) and 72 Foreign Trade and Payments Ordinance.

Exceptions from reporting requirements apply if the total balance sheet of the domestic company in which the foreign national participates or business assets ascribed to the domestic branch or permanent establishment do not exceed €3 million.⁸² Reporting requirements are also not applicable if the domestic resident is unable to access relevant reporting documents for actual or legal reasons or if the domestic or dependent domestic company in which commercially associated foreigners participate is not aware that the foreign nationals are commercially associated.⁸³

iii Anti-corruption

The German Criminal Code⁸⁴ generally provides for measures against bribing public officials, European public officials or persons entrusted with special public service functions. The Criminal Code penalises the acceptance, offering, promising or granting of a bribe.⁸⁵ Sanctions for the offeror and the receiving person can include imprisonment of up to five years or fines in less serious cases.

Corporations as such cannot be subject to criminal sanctions. However, the Criminal Code extends corporate liability to the responsible representative: Criminal offences committed within the corporate structure of a legal entity will be attributed to: (1) the responsible person in his or her capacity as an organ authorised to represent a legal entity; (2) a partner authorised to represent a partnership with independent legal capacity; or (3) as a statutory representative of another.⁸⁶

IX CURRENT DEVELOPMENTS

i Pipelines and LNG

The total length of Germany's gas pipeline network is about 511,000km.⁸⁷ The pipelines import natural gas to Germany and distribute it around the country. The pipeline network is also interconnected to pipelines in other EU countries, and gas is transported across Germany to other EU Member States. There are 16 gas transmission system operators currently operating on the German gas market while other players include operators of distribution systems or storage facilities.⁸⁸ Germany's gas market is part of the EU Internal Energy Market, and market participants are not only subject to national legislation but also to EU regulations. Rules from the EU's Third Energy Package on unbundling for operators of gas transmission systems and storage system operators, therefore, affect gas market participants in Germany.⁸⁹

⁸² Section 65(4) No. 1 and 2 Foreign Trade and Payments Ordinance.

⁸³ Section 65(4) Foreign Trade and Payments Ordinance.

An English translation is available at https://www.gesetze-im-internet.de/englisch_stgb/englisch_stgb.html.

Please note that this translation is not binding and may not reflect the latest legislative changes.

⁸⁵ Sections 331 to 336 Criminal Code.

⁸⁶ Section 14 Criminal Code.

⁸⁷ Federal Ministry for Economic Affairs and Energy, Erdgasversorgung in Deutschland, available at https://www.bmwi.de/Redaktion/DE/Artikel/Energie/gas-erdgasversorgung-in-deutschland.html (status: February 2017).

⁸⁸ Federal Ministry for Economic Affairs and Energy, Key Factors for a Secure Energy Supply, available at https://www.bmwi.de/Redaktion/EN/Dossier/conventional-energy-sources.html (last visited 22 July 2018).

⁸⁹ Article 15 Directive 2009/73/EC.

As Germany relies on gas imports, the pipeline network will be further expanded to ensure a reliable gas supply that meets demand. Expansion projects include the Nord Stream 2 pipeline, which will transport even more natural gas directly from Russia to Germany across the Baltic Sea. The Nord Stream 2 project will result in the longest offshore gas pipeline in the world. However, the expansion is environmentally and politically controversial. Both the European Parliament and Commission have expressed their opposition to the project, and the Commission asked the European Council for a mandate to negotiate an agreement with Russia regarding the management of the Nord Stream 2 project. Ourrently, a legislative proposal to revise the common rules for the internal gas market is under way; this would impact existing and future gas pipelines between the EU and third countries. If adopted, the Nord Stream 2 pipeline would have to fully comply with the revised rules on third-party access, tariff regulation, ownership unbundling and transparency. Derogations and exemptions would be possible, and it remains to be seen whether they could be applicable to the Nord Stream 2 project.

However, despite the controversies surrounding the project and while the EU legislative proposal is moving forward, the construction of the pipeline is progressing on German territory. After having carried out the necessary environmental impact assessment and public hearings, the relevant authorities have granted their approval to construct the pipeline in the first quarter of 2017.⁹³ Following the approval, preparatory work for the installation of the pipelines in German coastal waters have already begun, and the first pipelines have been laid.⁹⁴

Another expansion of the pipeline grid focuses on the 'Southern Gas Corridor'. The Trans Adriatic Pipeline shall supply Europe and, only indirectly, Germany with gas from Azerbaijan to Europe.⁹⁵ With more than 70 per cent of the pipeline already completed, the project remains on track to deliver gas to Europe from 2020 onwards.⁹⁶

While Germany relies heavily on gas imports, other methods of transportation and storage of gas may become increasingly important. LNG (liquefied natural gas) is particularly beneficial for transportation and storage, and, therefore, access to LNG terminals plays an increasing role. In February, the government held in its coalition agreement that Germany

⁹⁰ European Parliament, Common rules for gas pipelines entering the EU internal market (3 July 2018), available at http://www.europarl.europa.eu/RegData/etudes/BRIE/2018/614673/EPRS_ BRI(2018)614673_EN.pdf, p. 2.

⁹¹ European Parliament, Common rules for gas pipelines entering the EU internal market (3 July 2018), available at www.europarl.europa.eu/RegData/etudes/BRIE/2018/614673/EPRS_BRI(2018)614673_ EN.pdf, p. 2.

⁹² European Parliament, Common rules for gas pipelines entering the EU internal market (3 July 2018), available at www.europarl.europa.eu/RegData/etudes/BRIE/2018/614673/EPRS_BRI(2018)614673_ EN.pdf, p. 5.

⁹³ Nord Stream 2, German Permitting Process, available at https://www.nord-stream2.com/ permitting-germany/ (last visited 22 July 2018).

⁹⁴ Handelsblatt (25 July 2018), Nord Stream 2 verlegt erste Rohre der umstrittenen Ostseepipeline, available at https://handelsblatt.com/unternehmen/energie/erdgas-nord-stream-2-verlegt-erste-rohre-derumstrittenen-ostseepipeline/2284184.html.

⁹⁵ Federal Ministry for Economic Affairs and Energy, Instrument Used to Secure Gas Supply, available at https://www.bmwi.de/Redaktion/EN/Artikel/Energy/gas-instrumente-zur-sicherung-der-versorgung.html (last visited 22 July 2018).

⁹⁶ Trans Adriatic Pipeline, Construction progress, available at https://www.tap-ag.com/pipeline-construction/construction-progress (last visited 22 July 2018).

should be turned into a location for LNG infrastructure. Currently, Germany does not have its own reception terminal for LNG but access to LNG can be secured through Belgium, the Netherlands and other European countries. Ferman gas companies have already begun to acquire stakes in LNG terminals abroad and reportedly plan to acquire further capacities in Belgium, France and the Netherlands. Furthermore, there are plans for building Germany's first LNG terminal in northern Germany. The final investment decision is scheduled for 2019, and after a three-year construction phase the terminal is supposed to go online in 2022. While the International Energy Agency predicts a 20 per cent rise of LNG imports to Europe by 2040 from 2016 levels, Trump predicts that Europe will become a 'massive buyer of [US] LNG'. It remains to be seen whether US LNG will be sufficiently commercially attractive for that to happen.

ii Storage

Germany has the world's fourth-largest gas-storage capacity, which is also the largest within the EU. ¹⁰¹ The volume of usable working gas was 24.4 billion cubic metres in 2017. ¹⁰² Natural gas storage facilities cannot only balance short-term fluctuations of demand, but they also play an important role for the security of supply. Theoretically, the total storage capacity could supply Germany for 80 days on average. ¹⁰³ To further ensure a secure gas supply, the total storage volume is supposed to be increased by additional 6 billion cubic metres over the next few years, depending on commercial viability. ¹⁰⁴

iii Energiewende

The *Energiewende* and declining production dominate the debate in Germany about further reducing dependency on oil and natural gas and imports. However, conventional oil and gas resources will continue to ensure a secure energy supply at least over the next few years. The transition from conventional fossil fuels to renewable energy sources also includes energy efficiency measures that further aim at being independent from oil and gas sources. National

⁹⁷ Federal Ministry for Economic Affairs and Energy, Instrument Used to Secure Gas Supply, available at https://www.bmwi.de/Redaktion/EN/Artikel/Energy/gas-instrumente-zur-sicherung-der-versorgung.html (last visited 22 July 2018).

⁹⁸ Federal Ministry for Economic Affairs and Energy, Instrument Used to Secure Gas Supply, available at https://www.bmwi.de/Redaktion/EN/Artikel/Energy/gas-instrumente-zur-sicherung-der-versorgung.html (last visited 22 July 2018).

⁹⁹ German LNG Terminal, Timeline, available at https://germanlng.com/timing/ (last visited 22 July 2018).

Bloomberg News Article, available at https://www.bloomberg.com/news/articles/2018-07-25/europe-to-become-massive-buyer-of-u-s-lng-trump-says (last visited 9 August 2018).

¹⁰¹ Federal Ministry for Economic Affairs and Energy, Key Factors for a Secure Energy Supply, available at https://www.bmwi.de/Redaktion/EN/Dossier/conventional-energy-sources.html (last visited 12 September 2017).

¹⁰² Federal Association of German Gas, Oil and Geothermal Energy, Numbers and Facts, available at http://www.bveg.de/Erdgas/Zahlen-und-Fakten (last visited 24 July 2018).

¹⁰³ Federal Ministry for Economic Affairs and Energy, Monitoring Report on Natural Gas Supply Security (status: July 2017), available at https://www.bmwi.de/Redaktion/DE/Publikationen/Energie/monitoringbericht-versorgungssicherheit-2017.pdf?__blob=publicationFile&v=20, p. 15.

¹⁰⁴ Federal Association of German Gas, Oil and Geothermal Energy, Security of Supply Through Natural Gas Storage, available at http://www.bveg.de/Erdgas/Erdgasspeicher/Versorgungssicherheit (last visited 24 July 2018).

legislation with regard to energy efficiency measures as well as oil and gas will also be impacted by the further implementation of the European Union's internal gas market and the Energy Union.

iv Digitisation

The digital age brings further challenges to the oil and gas industry in Germany. Digitisation of exploration and extraction methods and new automated technologies will continue to change the way how oil and gas fields can be explored and extracted. The optimisation of exploration and extraction, the improvement of cost management as well as enhanced protection of health, safety and the environment will change the future of the oil and gas industry in Germany. Companies already employ new automated technologies, big data analytics or visualising software for more efficient production. It remains to be seen how the legislature will work together with industry stakeholders and other interest groups to develop and establish a legal framework to adapt to the digital change.

Appendix 1

ABOUT THE AUTHORS

MATTHIAS LANG

Bird & Bird LLP

Matthias Lang is a partner in Bird & Bird's energy and utilities sector group and a member of the regulatory and administrative practice group. He studied economics at Hamburg School of Business Administration and was a banker before he studied law in Trier and Geneva. He did his PhD in law at Humboldt University in Berlin.

Matthias regularly advises clients on energy, regulatory, and environmental law as well as issues arising from public commercial law. He has additional expertise in corporate law, administrative, European and real estate law, as well as standardisation. Matthias has extensive experience in advising clients on all aspects of the German energy transition and cross-border energy issues, including both conventional and renewable energy generation, as well planning and permit procedures for transmission and distribution systems or other industrial installations. He has worked on numerous complex infrastructure projects and transactions in regulated industries. He represents clients before the Federal Network Agency, ministries and other authorities in diverse administrative, regulatory or legislative proceedings, before national and European courts and in arbitration proceedings. He has also advised on the transposition of European law, such as the Third Internal Market Package and various European environmental directives and regulations.

Matthias teaches energy law courses at Free University Berlin and Technical University Berlin. He is chair of the oil and gas committee of the International Bar Association and on the board of the German-American Lawyer's Association (DAJV).

BIRD & BIRD LLP

Carl-Theodor-Straße 6 40213 Düsseldorf Germany

Tel: +49 211 2005 6000 Fax: +49 211 2005 6011 matthias.lang@twobirds.com www.twobirds.com

Law Business Research

ISBN 978-1-912228-65-2