

Table 3: Federal state law regulations on minesite and extraction royalties*

Federal State	Legal basis	Minesite royalties	Extraction royalties**	
			Levy rates	Special regulations
Baden-Wuerttemberg	<ul style="list-style-type: none"> Ordinance (VO) of the Ministry of the Environment on minesite and extraction royalties, December 11, 2006 (Legal Gazette – GBl, Page 395), last amended by the VO of November 11, 2014 (GBl, Page 618) 	<ul style="list-style-type: none"> Crude oil, natural gas, rock salt and brine, €20 for each km² or fraction thereof for the first year Maximum rate crude oil, natural gas: €80 Maximum rate rock salt and brine: €60 	<ul style="list-style-type: none"> Assessed at market value <ul style="list-style-type: none"> Crude oil: 19% Rock salt: 5% or 2.5%⁵ Natural gas: 37% of the price obtained⁷ 	<ul style="list-style-type: none"> 100% exemption <ul style="list-style-type: none"> Geothermal energy Brine Crude oil and natural gas: site conditioning costs at the levy rate²
Bavaria	<ul style="list-style-type: none"> Ordinance (VO) of December 22, 1998 on minesite and extraction royalties, (Legal Gazette – GVBl, 1998 Page 1050), last amended by € rule of 2001 	<ul style="list-style-type: none"> Crude oil, natural gas, €20 for each km² or fraction thereof for the first year¹ Maximum rate: €60 	<ul style="list-style-type: none"> 5% of the market value for oil extracted in the Aitingen area 	<ul style="list-style-type: none"> 100% exemption <ul style="list-style-type: none"> Crude oil with the exception of the Aitingen area Natural gas with the exception of the Breitbrunn-Eggstätt area
Berlin	<ul style="list-style-type: none"> see Brandenburg 			
Brandenburg	<ul style="list-style-type: none"> Ordinance (VO) of December 11, 2015 on minesite and extraction royalties in the state of Brandenburg (Brandenburg Extrac-tion Royalties Ordinance – BbgFOrdAV) (Law and Ordinance Gazette – GVBl.III/15, No. 69) 	<ul style="list-style-type: none"> Crude oil, natural gas, €20 for each km² or fraction thereof for the first year¹ Maximum rate: €60 	<ul style="list-style-type: none"> Assessed at market value <ul style="list-style-type: none"> Crude oil, argillaceous (clayey) rocks: 10% Gravels and sands: 7% Peat, including available organic silt and natural stone: 5% Rock salt and brine: 1% or 0.5%⁵ Natural gas: 10% of the assessed rate⁸ 	<ul style="list-style-type: none"> 100% exemption <ul style="list-style-type: none"> Geothermal energy Natural brine and peat, extracted for balneological purposes or as a carrier for geothermal energy Crude oil and natural gas: site conditioning costs at the levy rate²
Bremen	<ul style="list-style-type: none"> Bremen Ordinance (VO) of May 10, 2012 on minesite and extraction royalties (Legal Gazette of the Free Hanseatic City of Bremen, Page 180) 	<ul style="list-style-type: none"> Crude oil, natural gas, €20 for each km² or fraction thereof for the first year¹ Maximum rate: €80 	<ul style="list-style-type: none"> Natural gas: 36% of the price obtained⁷ Crude oil: 9% of the market value multiplied by the taxable quantity⁶ Sands and gravel sands: 10% of the market value for extraction in coastal waters and continental shelf zones Brine: 1% or 0.5% of the market value⁶ 	<ul style="list-style-type: none"> 100% exemption <ul style="list-style-type: none"> Geothermal energy Natural brine, extracted for balneological purposes Sulphur Crude oil and natural gas: site conditioning costs at the levy rate⁴ 75% in the year extraction was started, and in the following 5 calendar years (in the case of extraction from deposit areas with an average effective permeability below 0.6 millidarcy) 40% in the case of extraction from almost depleted deposits with an average extraction rate of less than 4,500 m³/h.

1 Increases by €20 for each subsequent year up to the specified maximum.

2 Upper limit: The total extraction royalties levied on the deposits/fields in question, as per the state ordinance (LVO)

3 Applies to rock salt extracted during the construction of an underground store, but not economically exploited.

4 Applies to crude oil, which is extracted (1) from abandoned deposits which have been re-developed, (2) from drill holes with a depth of more than 4,000 m or (3) (additionally) by means of tertiary processes.

5 In €/KWh including the further transport costs. In the state of Bremen, a reduction in the assessed rate by the actual further transport costs is possible. It applies to natural gas used in purification plants in the amount of €0.002945/m³.

6 The weighted average of the cross-border prices for natural gas as published monthly by Destatis during the levy period in €/KWh.

* The specified state-specific levy rates are based on the German Federal guidelines for minesite and extraction royalties as per the BBergG.

** All regulations on the amount of the levy rates and all special regulations are time-limited. They are regularly checked and adjusted by updating the state regulations on minesite and extraction royalties (where required).

Federal State	Legal basis	Minesite royalties	Extraction royalties**	Special regulations
			Levy rates	
Hamburg	<ul style="list-style-type: none"> Ordinance (VO) of December 24, 1985 on minesite and extraction royalties, (Hamburg Law and Ordinance Gazette – HmbGVBL, Page 389), last amended by the VO of April 22, 2014 (HmbGVBL, Page 142). 	<ul style="list-style-type: none"> Crude oil, natural gas, €20 for each km² or fraction thereof for the first year¹ Maximum rate: €80 	<ul style="list-style-type: none"> Assessed at market value <ul style="list-style-type: none"> Crude oil: 7% Brine: 1% or 0.5%⁵ Natural gas: 37% of the assessed rate⁷ multiplied by the taxable volume. Currently exempted from all duties under an annual renewal clause. 	<ul style="list-style-type: none"> 100% exemption <ul style="list-style-type: none"> Geothermal energy Natural brine, extracted for balneological purposes Sulphur Crude oil and natural gas: Natural & petroleum gas: site conditioning costs at the levy rate²
Hesse	<ul style="list-style-type: none"> Ordinance (VO) of October 6, 2014, amending the Hessian ordinance on minesite and extraction royalties (Law and Ordinance Gazette – GVBL I, Page 232) (time-limited to December 31, 2019) 	<ul style="list-style-type: none"> Crude oil, natural gas, €20 for each km² or fraction thereof for the first year¹ Maximum rate: €60 	<ul style="list-style-type: none"> Assessed at market value <ul style="list-style-type: none"> Non-ferrous metals and barite: 1% Rock salt and brine: 1% or 0.5%⁵ Potash, magnesium and boron salts: 1% of the assessed rate¹⁰ 	<ul style="list-style-type: none"> 100% exemption <ul style="list-style-type: none"> Geothermal energy Natural brine, extracted for balneological purposes Non-ferrous metals and barite: Royalties in the amount of the guaranteed percentage of the processing costs (incurred during the levying period) that are necessary in order to produce the commercial product.
Mecklenburg-Western Pomerania	<ul style="list-style-type: none"> Ordinance (VO) of April 8, 2014, on minesite and extraction royalties (FeFördAVO MV) (Law and Ordinance Gazette – GVOBL, M-V, Page 140) 	<ul style="list-style-type: none"> Crude oil, natural gas, €20 for each km² or fraction thereof for the first year¹ Maximum rate: €80 	<ul style="list-style-type: none"> Assessed at market value <ul style="list-style-type: none"> Crude oil: 21% Gravels, chalk, limestone, gravel, quartz and special sands and clayey rocks: 10% Peat/Organic Silt: 5% Brine: 1% or 0.5%⁵ Natural & petroleum gas: 20% of the assessed rate⁸ 	<ul style="list-style-type: none"> 100% exemption <ul style="list-style-type: none"> Geothermal energy Marine pebbles and sands, collected for coastal protection purposes Sulphur

- Increases by €20 for each subsequent year up to the specified maximum.
- Upper limit: The total extraction royalties levied on the deposits/fields in question, as per the state ordinance (LVO)
- Applies to rock salt extracted during the construction of an underground store, but not economically exploited.
- In € / km² including the further transport costs. In the state of Bremen, a reduction in the assessed rate by the actual further transport costs is possible.
- Applies to natural gas used for purification plants in the amount of €0.05 per km³ of gas.
- The right to use of the gas derived from natural gas is published by Destatis during the levy period in € / km³.
- The right to use of the gas derived from natural gas is published by Destatis during the levy period in € / km³.
- Sum of the products of (1) the average content of potassium oxide (K₂O) and magnesium sulphate (MgSO₄) extracted from the crude salts on the licensed site and (2) the amount of €0.75 for potassium oxide (K₂O) and €0.25 for magnesium sulphate (MgSO₄) per ton and percentage point thereof.

** All regulations on the amount of the levy rates and all special regulations are time-limited. They are regularly checked and adjusted by updating the state regulations on minesite and extraction royalties (where required).

Federal State	Legal basis	Minesite royalties	Extraction royalties**	Special regulations
Lower Saxony	<ul style="list-style-type: none"> Lower Saxony Ordinance (VO) on minesite and extraction royalties, December 11, 2010 (Lower Saxony Legal Gazette – Nds. GBl, Page 395), last amended by the VO of December 15, 2014 (Nds. GBl, Page 273). 	<ul style="list-style-type: none"> Crude oil, natural gas, €20 for each km² or fraction thereof for the first year¹ Maximum rate: €80 	<ul style="list-style-type: none"> Crude oil: 18% of the market value for crude oil extracted from the Bramberge, Emlichheim, Georgsdorf, Ringe and Kührlermoor Valendis deposits Natural gas: 30% of the assessed rate⁸ multiplied by the taxable volume Brine: 1% or 0.5%⁵ 	<ul style="list-style-type: none"> 100% exemption <ul style="list-style-type: none"> Geothermal energy Natural brine, extracted for balneological purposes Sulphur Crude oil: site conditioning costs at the levy rate for the taxable areas², as well as <ul style="list-style-type: none"> 50% in the case of extraction using tertiary procedures Natural gas: site conditioning costs at the levy rate², and <ul style="list-style-type: none"> 50% in the case of extraction from a deposit (1.) in the area of the continental shelf or (2.) in coastal waters using production platforms 75% in the year extraction was started, and in the following 5 calendar years (in the case of extraction from deposit areas with an average effective permeability below 0.6 mDarcy) 40% in the case of extraction from almost depleted deposits with an average extraction rate of less than 4,500 m³/h.
North Rhine-Westphalia	<ul style="list-style-type: none"> VO of December 14, 1998, on minesite and extraction royalties (FEVO) 	<ul style="list-style-type: none"> Crude oil, natural gas, €20 for each km² or fraction thereof for the first year¹ Maximum rate: €60 	<ul style="list-style-type: none"> Mine gas 0.3 €cents per m³ of methane¹² Natural gas: 16% of the assessed rate^{9, 12, 13} Rock salt and brine: 1% or 0.5% of the market value 	<ul style="list-style-type: none"> 100% exemption <ul style="list-style-type: none"> Geothermal energy Natural brine, extracted for balneological purposes Natural and mine gas: site conditioning costs at the levy rate¹, and <ul style="list-style-type: none"> 50% on gas (1.) additionally extracted by means of processes for opening up low-permeability deposits, (2.) extracted at depths of more than 5,000 metres or (3.) extracted from hard coal seams at the surface 50% for a period of 5 years from the start of extraction in the case of extraction in areas in which development operations were started during the period from January 1, 1999 to December 31, 2005 <ul style="list-style-type: none"> in whole or in part upon application in individual cases, insofar as any threat to public safety or order caused by the extraction operation is averted.

- Increases by €20 for each subsequent year up to the specified maximum.
- Upper limit: The total extraction royalties levied on the deposits/fields in question, as per the state ordinance (LVO)
- Upper limit: The value of the natural gas extracted in the natural gas field, assessed pursuant to the state ordinance (LVO).
- Applies to rock salt extracted during the construction of an underground store, but not economically exploited.
- The weighted average of the cross-border prices for natural gas as published monthly by Destatis during the levy period in €/MWh.
- The quotient of the cross-border value and the amount of natural gas imported during the levy period in €/cents/m³.
- The quotient of the assessed rate by a rate for further transport costs is possible.
- A reduction of the assessed rate by 0.105 €/cents/m³ for natural gas found in refining plants is possible.
- A reduction of the assessed rate by 0.105 €/cents/m³ for natural gas found in refining plants is possible.

** All regulations on the amount of the levy rates and all special regulations are time-limited. They are regularly checked and adjusted by updating the state regulations on minesite and extraction royalties (where required).

Federal State	Legal basis	Minesite royalties	Extraction royalties**	Special regulations
			Levy rates	
Rhineland-Palatinate	<ul style="list-style-type: none"> LVO (State Law Ordinance) of September 23, 1986 on minesite and extraction royalties (Rhineland-Palatinate Law and Ordinance Gazette 1986, Page 271), last amended by Art. 1 of the VO of December 3, 2014 (Rhineland-Palatinate Law and Ordinance Gazette 2014, Page 286) 		<ul style="list-style-type: none"> Assessed at market value <ul style="list-style-type: none"> Crude oil: 12% for the Römerberg-Speyer and Rülzheim deposits 15% and 7% resp. 10% for crude oil extracted from (1.) dead oil deposits, (2.) abandoned deposits which have been re-developed, (3.) depths of more than 4,000 metres, or extracted additionally by means of (4.) tertiary processes or (5.) processes for opening up low-permeability deposits. Brine: 1% or 0.5%³ Petroleum gas: 10% of the price obtained^{7, 12} 	<ul style="list-style-type: none"> 100% exemption <ul style="list-style-type: none"> Natural brine, extracted for balneological purposes Geothermal energy Natural gas extracted for direct conversion into electricity Crude oil and natural gas: Natural & petroleum gas: site conditioning costs at the levy rate⁴
Saarland	<ul style="list-style-type: none"> VO of March 5, 1987 on minesite and extraction royalties (Official Gazette, Page 250), last amended by the law of November 7, 2001 (Official Gazette, Page 2158) 		<ul style="list-style-type: none"> Natural gas: 10% of the price obtained⁷ 	<ul style="list-style-type: none"> Natural gas: site conditioning costs at the levy rate³
Sachsen	<ul style="list-style-type: none"> Saxon State Ministry of Economy, Labour and Transport VO of July 21, 1997 on minesite and extraction royalties (FFAVO); legally amended as of January 1, 2009; last amended by VO of June 20, 2012 (Saxon GVBl., Page 442). 		<ul style="list-style-type: none"> Assessed at market value <ul style="list-style-type: none"> Fluorite <ul style="list-style-type: none"> > 280 €/ton: 1% > 320 €/ton: 2% > 360 €/ton: 4% > 400 €/ton: 10% Gravels and gravel sands: 8% Natural stone: 4% 	<ul style="list-style-type: none"> 100% exemption <ul style="list-style-type: none"> Lignite Geothermal energy Fluorite < 280 €/ton Marble Barite Brine Free-to-mine natural resources extracted together with fluorite
Saxony-Anhalt	<ul style="list-style-type: none"> VO of Monday, November 18, 1996 on minesite and extraction royalties (Saxony-Anhalt Official Gazette, Page 348), last amended by the VO of February 23, 2016 (Saxony-Anhalt Official Gazette, Page 111). 		<ul style="list-style-type: none"> Assessed at market value <ul style="list-style-type: none"> Gravels, sands, quartz and special sands: 7% Natural stone: 5% Rock salt and brine: 1% or 0.5%⁵ Stone for the production of ashlar and decorative stones from sandstone: 4% of the assessed rate¹¹ 	<ul style="list-style-type: none"> 100% exemption <ul style="list-style-type: none"> Lignite

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- 3 Upper limit: The value of the natural gas extracted in the natural gas field, assessed pursuant to the state ordinance (LVO).
- 4 Upper limit: Market value or the value of the crude oil and petroleum gas extracted in the oil field, assessed pursuant to § 31(2), 2nd sentence of the BbergG.
- 5 Applies to rock salt extracted during the construction of an underground store, but not economically exploited.
- 7 In 2014, the transport costs for the state of the mineral resources assessed rate by the actual further transport costs is possible. It applies to the production value and the production volume of the production achieved during the levy period in €/ton, assessed from the data collected by the Destatis.
- 12 A reduction of the assessed rate by a flat rate for further transport costs is possible.

Federal State	Legal basis	Minesite royalties	Extraction royalties**	Special regulations
Schleswig-Holstein	<ul style="list-style-type: none"> State ordinance (VO) on minesite and extraction royalties, December 11, 2012 (Schl.-H. Law and Ordinance Gazette, Page 776), last amended by the State Law Ordinance (LVO) of December 3, 2014 (Schl.-H. Law and Ordinance Gazette, Page 496). 	<ul style="list-style-type: none"> Crude oil, natural gas, €20 for each km² or fraction thereof for the first year¹ Maximum rate: €80 	Levy rates <ul style="list-style-type: none"> Assessed at market value <ul style="list-style-type: none"> Crude oil: 40%, multiplied by the taxable amount. In the case of extractions from the Deutsche Nordsee A6/B4 and Heide-Mittelplate I licenced extraction sites, the calculation of the extraction interest is carried out as follows: $Z = 0.0076 \times \text{ÖP}^2 - 1.15 \times \text{ÖP} + 64.5$ (Z = interest, ÖP is one thousandth of the market value multiplied by 135), where the minimum extraction interest rate is 21%, with a maximum of 40%. Brine: 1% or 0.5%⁵ Natural gas: 40% of the assessed rate⁸ multiplied by the taxable volume. 18% in the case of extractions from the Deutsche Nordsee A6/B4 and Heide-Mittelplate I authorised deposits 	Special regulations <ul style="list-style-type: none"> 100% exemption <ul style="list-style-type: none"> Natural brine, extracted for balneological purposes Geothermal energy Crude oil and natural gas: Natural gas: site conditioning costs at the levy rate²
			Levy rates <ul style="list-style-type: none"> Assessed at market value <ul style="list-style-type: none"> Gypsum and anhydrite: 5% Gravels and gravel sands: 8% Natural stone: 5% Peat/Organic Silt: 3% Ashlar and decorative stones: 4% of the assessed rate¹¹ 	
Thuringia	<ul style="list-style-type: none"> Thuringia Ordinance (VO) on minesite and extraction royalties, August 23, 2005, last amended by the VO of November 30, 2015 (Law and Ordinance Gazette – GVBl, Page 210). 		Levy rates <ul style="list-style-type: none"> Assessed at market value <ul style="list-style-type: none"> Gypsum and anhydrite: 5% Gravels and gravel sands: 8% Natural stone: 5% Peat/Organic Silt: 3% Ashlar and decorative stones: 4% of the assessed rate¹¹ 	Special regulations <ul style="list-style-type: none"> 100% exemption <ul style="list-style-type: none"> Geothermal energy: Prospecting and extraction Rock salt: Extraction

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1. Increase by €20 for each subsequent year up to the specified maximum
 2. Upper limit: The extraction royalties linked on the deposits /fields in question, as per the state ordinance (LVO)
 5. Applies to rock salt extracted during the construction of an underground store, but not economically exploited.
 8. The weighted average of the cross-border prices for natural gas as published monthly by Destatis during the levy period in €/MWh.
 11. 20% of the quotients of the production value and the production volume of the production achieved during the levy period in €/ton, assessed from the data collected by the Destatis.