This country-specific Q&A provides an overview of energy - oil & gas laws and regulations applicable in United Kingdom.

For a full list of jurisdictional Q&As visit [here](#)
1. Does your jurisdiction have an established upstream oil and gas industry? What are the current production levels and what are the oil and gas reserve levels?

The UK has a long-established oil and gas industry, with commercial-scale production taking place in the UK Continental Shelf (UKCS) since the late 1960s. Crude oil production levels reached a peak in 1999 and natural gas production levels reached a peak in 2000, and both have been gradually declining since then. However, the oil and gas industry continues to be an important contributor to the UK’s economy and energy security. In 2018 1.7 million barrels of oil equivalent (boe) were produced per day.

The Oil and Gas Authority (OGA) (the upstream oil and gas regulator) has estimated that, as at the end of 2018, the remaining UKCS recoverable petroleum resources were in the range of 10 to 20 billion boe, including discovered and undiscovered petroleum resources. In terms of proven and probable (2P) reserves, this has been estimated to be 5.5 billion boe. It has also been estimated that, assuming current production projections, these reserves could sustain production from the UKCS for another 20 years or more.

2. How are rights to explore and exploit oil and gas resources granted? Please provide a brief overview of the structure of the regulatory regime for upstream oil and gas. Is the regime the same for both onshore and offshore?

The principal legislation governing the development of natural oil and gas reserves in the UK is the Petroleum Act 1998 (Petroleum Act). The Petroleum Act establishes a licensing regime, which applies onshore and offshore in the whole of the UK. The only exception is Northern Ireland, which has a separate regime for its onshore oil and gas resources. In addition, the administration and enforcement of the licensing regime as it applies onshore in Scotland and onshore in Wales has been devolved to the Scottish and Welsh Governments respectively. Offshore, the Petroleum Act applies to the territorial sea and the UKCS. Under the Petroleum Act, all rights to petroleum including the rights relating to “searching and boring for and getting petroleum” are vested in the Crown. The OGA, on behalf of the Crown, may grant licences “to search and bore for and get petroleum”.

Licences are issued through competitive licensing rounds. Seaward licensing rounds take place on an annual basis, while landward licensing rounds are less frequent (reflecting the fact that there is only limited onshore oil and gas exploration and production in the UK). The most recent offshore licensing round, the 32nd offshore licensing round, was launched on 10 July 2019, with 768 blocks or part-blocks on offer across the main producing areas of the UKCS.

A party can apply for a licence over a particular area (either by itself or as part of a joint venture) during a licensing round. The EU Hydrocarbons Licensing Directive of 1994 sets out rules that EU Member States must follow when issuing petroleum licences, including the factors that may (and may not) be taken into account when deciding whether or not to issue a licence, and the minimum amount of public consultation required. The Directive is
implemented in the UK by the Hydrocarbons Licensing Directive Regulations 1995. The Regulations require an invitation for applications to be published in the European Journal at least 90 days in advance, together with the criteria upon which applications are to be determined.

3. **What are the key features of the licence/production sharing contract/concession/other pursuant to which oil and gas companies undertake oil and gas exploration and exploitation?**

There are two main types of offshore licences: seaward production licences and seaward exploration licences. Seaward production licences cover the full life of a field, from exploration to production, while seaward production licences are short-term non-exclusive licences which only cover non-intrusive exploration. Similarly, there are also two main types of onshore licences: petroleum exploration and development licences (which cover the full life of a field) and landward exploration licences.

Petroleum exploration and development licences (onshore) and seaward production licences (offshore) are valid for a sequence of periods, called terms. These are designed to comprise the typical life cycle of a field: exploration, appraisal, production. A licence will expire automatically at the end of each term, unless the licensee has sufficiently progressed to warrant a chance to move into the next term.

The initial term is usually an exploration period. For seaward production licences this is usually set at four to six years (depending on the variation of the seaward production licence, as discussed below). The licence will expire at the end of the initial term unless the licensee has completed the work programme. At this time the licensee must also relinquish a fixed amount of acreage (usually 50 per cent). The second term is for appraisal and development. This is also four to six years for seaward production licences. The licence will expire at the end of the second term unless the OGA has approved a development plan. The third term is intended for production. It is 18 years for seaward production licences.

Over the years, there have been some variations of the standard seaward production licence (often referred to as the traditional seaward production licence), to cater for different circumstances. In particular, the “frontier” licence had a longer initial and second term, while the “promote” licence was designed to allow small and start-up companies to apply for a licence first and to attract the necessary operating and financial capability later. The variation of the seaward production licence currently being offered to licensees (since the 30th offshore licensing round) is the “innovate” licence. The innovate licence offers greater flexibility in the durations of the initial and second terms. An applicant for an innovate licence is able to propose the durations of the initial and second terms. Moreover, the initial term of an innovate licence can be subdivided into up to three phases, with the work programme being correspondingly divided, as follows:

- Phase A is a period for carrying out geotechnical studies and geophysical data
reprocessing;
- Phase B is a period for undertaking seismic surveys and acquiring other geophysical data; and
- Phase C is for drilling.

Phases A and B are optional and depend on the licence applicant’s plans. Every work programme must have at least a Phase C.

Most licences follow a standard format and incorporate specified conditions called model clauses, which govern the relationship between the licensee and the OGA. The model clauses are published in statutory instruments made pursuant to the Petroleum Act. The model clauses applicable to a particular licence are those which are in force at the time the licence was granted. The model clauses applying to older licences are set out in the Petroleum (Current Model Clauses) Order 1999 (which consolidated various earlier statutory instruments), while more recent licences will have the model clauses set out in the Petroleum Licensing (Exploration and Production) (Seaward and Landward Areas) Regulations 2004 or the Petroleum Licensing (Production) (Seaward Areas) Regulations 2008.

4. Are there any unconventional hydrocarbon resources (such as shale gas) being exploited and is there a separate regulatory regime for unconventionals?

Geological studies have identified substantial shale gas resources in the UK, but to date no commercial production has taken place. There was a growth in shale gas exploration activities from 2008, but in 2011 the Government imposed a moratorium on shale gas exploration after some seismic events (earth tremors) were linked to hydraulic fracturing. That moratorium was lifted in December 2012 and the Government expressed full support for shale gas development. The exploration for and production of unconventional oil and gas resources is subject to the same Petroleum Act regime as conventional resources. However, the Government introduced various regulatory measures aimed at facilitating the development of a shale gas industry in the UK, while at the same time addressing any environmental and safety concerns relating to shale gas development. These included various “safeguard measures” (such as requiring independent well inspections and the monitoring of groundwater), and a simplified procedure under the Infrastructure Act 2015 for obtaining the right to use underground land 300 metres and below for the purpose of exploiting oil and gas. However, in November 2019 the UK Government decided, once again, to put an end to all shale gas exploration in England for the time being. This decision followed the publication of a report by the OGA which concluded that it is not possible with current technology to accurately predict the probability of seismic activity associated with hydraulic fracturing. The devolved Governments of Scotland and Wales had previously already indicated that they would not support shale gas development.

5. Who are the key regulators for the upstream oil and gas industry?

Until recently, the Department for Business, Energy and Industrial Strategy (BEIS), and its predecessor departments, was responsible for administering and enforcing the licensing
regime under the Petroleum Act. However, a new independent regulator for the upstream oil and gas industry – the OGA – was established in 2015 as part of a general review (the Wood Review) of the UK upstream industry, designed to revive the industry. The OGA is tasked with delivering the new “Maximising Economic Recovery of UK petroleum” (MER UK) strategy, which imposes an obligation the OGA, as well as licensees, to “take the steps necessary to secure that the maximum value of economically recoverable petroleum is recovered from the strata beneath relevant UK waters”.

The OGA has taken over from BEIS nearly all regulatory functions relating to the upstream oil and gas industry. However, BEIS has retained responsibility for enforcing the decommissioning regime under the Petroleum Act (see question 11 below) and the environmental legislation applying to offshore oil and gas activities (see question 8 below). BEIS carries out this function through a departmental unit called the Offshore Petroleum Regulator for Environment and Decommissioning (OPRED).

The Health and Safety Executive (HSE) is responsible for overseeing and enforcing the health and safety legal regime applying to upstream oil and gas development (see question 8 below). The Maritime and Coastguard Agency (MCA) also performs a more limited but important function, particularly in the context of emergency response to any offshore accidents.

Moreover, the HSE and OPRED work together in partnership as the Offshore Safety Directive Regulator (OSDR) – a body which acts as the Competent Authority for the purposes of the EU Offshore Safety Directive.

6. **Is the government directly involved in the upstream oil and gas industry? Is there a government-owned oil and gas company?**

   The UK Government does not directly participate in oil and gas exploration and production, through a national oil company or otherwise. All activity is carried out by international oil and gas companies under licences.

7. **Are there any special requirements for or restrictions on participation in the upstream oil and gas industry by foreign oil and gas companies?**

   To apply for a licence, a company must satisfy the OGA that it has a place of business within the UK. This means at least one of the following: having a staffed presence in the UK; being registered at Companies House as a UK company; or having a UK branch of a foreign company registered at Companies House. The residence requirements become more stringent when a licence moves to the production phase, requiring the licensee to be registered at Companies House as a UK company; or to carry on business through a “fixed place of business” in the UK.

8. **What are the key features of the environmental and health and safety regime that**
applies to upstream oil and gas activities?

The UK has a highly developed and stringent regulatory regime aimed at protecting the environment, and maintaining health and safety. The environmental regime is set out in a large number of different Acts and statutory instruments. Since the Deepwater Horizon disaster, one key area of focus has been the prevention of offshore oil spills. The UK already had an existing regime for the prevention of and dealing with environmental pollution, in the form of the Merchant Shipping (Oil Pollution Preparedness, Response Co-operation Convention) Regulations 1998, and the Offshore Installations (Emergency Pollution Control) Regulations 2002, under which the UK Government regulates potential environmental incidents involving offshore installations, with a view to ensuring that preventative measures are in place to limit pollution. The Offshore Petroleum Activities (Oil Pollution Prevention and Control) Regulations 2005 supplement the emergency planning requirements by imposing a permitting system for oil discharges from an offshore installation. However, new requirements were imposed when the EU enacted the Offshore Safety Directive of 2013, which was implemented in the UK by the Offshore Petroleum Licensing (Offshore Safety Directive) Regulations 2015 and other regulations.

Separate controls apply to onshore oil and gas operations. Local authorities and other government departments, such as the Environment Agency, play a role in overseeing and enforcing planning and environmental consents relating to onshore exploration and production.

The health and safety regime applicable to oil and gas activities is well established and was first subject to a detailed review three decades ago, in response to the Alpha Piper disaster. A key component of the health and safety framework is the “safety case” regime, currently set out under the Offshore Installations (Safety Case) Regulations 2005 and the Offshore Installations (Offshore Safety Directive) (Safety Case etc) Regulations 2015. One of the main requirements is that written safety cases and risk assessments be prepared by the operator, and then approved by the safety regulator, for all fixed and mobile offshore installations before such installations are brought into use on the UKCS.

9. How does the government derive value from oil and gas resources (royalties/production sharing/taxes)? Are there any special tax deductions or incentives offered?

Corporate tax is the principal means by which the Government derives revenue from upstream oil and gas production.

A uniform taxation system applies to all fields in the UK and the UKCS, although, as discussed below, some special tax deductions are available for fields which would not otherwise be commercially attractive.

The Ring Fence Corporation Tax (RFCT) applies to profits from oil and gas extraction
activities and rights in the UK and UKCS instead of normal Corporation Tax. It applies regardless of when development consent was given, and aims to prevent profits from these activities being reduced for tax purposes by the setting off of losses from other trading activities. The profits from oil and gas extraction activities and rights are “ring fenced” and treated for tax purposes as a separate trade, so that only losses derived from these activities can be set off against profits from these activities. The current rate of RFCT is 30 per cent (as opposed to the 19 per cent rate of normal Corporation Tax, falling to 17 per cent from 1 April 2020). RFCT liabilities are based on the book profits of the company which are then adjusted to arrive at the taxable profits. Deductions are available for items such as capital expenditure, plant and machinery allowances, research and development, expenditure on mineral exploration and access, and decommissioning.

A Supplementary Charge is also imposed on profits arising from any ring fenced activities. The Charge was first introduced in 2002, at a rate of 10 per cent. In 2011, the Government raised the rate of the Supplementary Charge from 20 per cent to 32 per cent. The Government justified this increases on the basis that the rise in oil prices had provided unexpected profits for oil and gas companies. Subsequently the Supplementary Charge was reduced again and since 1 January 2016 it has been set at 10 per cent.

A Petroleum Revenue Tax (PRT) previously applied to the net income from oil and gas extraction, and even after the new tax regime described above was introduced, PRT still applied in respect of those fields for which development consent was given prior to 16 March 1993. However, the rate of PRT was reduced to zero from 1 January 2016.

In 2009 the Government introduced a tax incentive regime in the form of “field allowances” to apply to small or new, technically challenging fields. A field allowance reduces the amount of adjusted ring fence profits for the licensee’s accounting period on which the company’s Supplementary Charge is charged.

In recent years the Government has focused on tax reforms aimed at helping oil and gas companies manage the burden posed by liabilities to carry out decommissioning. In particular, the Government introduced a Decommissioning Relief Deed regime to provides certainty for oil and gas companies over the tax relief they will receive when decommissioning assets in the future, and the the Finance Act 2019 makes provision for a transferable tax history mechanism, by which a seller of oil and gas assets may, on a joint election with a buyer, transfer its tax history to the buyer.

Licensees are also required to make annual payments (known as licence rental fees), which are calculated on the basis of the area under licence and incorporate an escalating scale of pre-determined rates per square kilometre. This is to encourage licensee companies to relinquish acreage not undergoing productive activity, thus making it available for relicensing to other potential interested applicants.
10. **Are there any restrictions on export, local content obligations or domestic supply obligations?**

In general, there are no such restrictions or obligations. The Government has certain emergency powers under the Energy Act 1976 to control the production and distribution of energy, including oil and gas, in exceptional circumstances, but these powers are intended to be used very rarely. Certain oil and gas companies also have compulsory oil stocking obligations to fulfil the requirements of the EU and the International Energy Agency.

11. **Does the regulatory regime include any specific decommissioning obligations?**

The Petroleum Act includes provisions designed to ensure that the Government is not left to fund the costs of decommissioning. Under the Petroleum Act, decommissioning obligations arise when OPRED serves a notice (a “section 29 notice”) to the operator of the field and each of the licensees, requiring them to submit a decommissioning programme. Once the decommissioning programme is approved, the section 29 notice-holders are legally obliged to carry it out. The obligation to carry out the approved decommissioning programme is joint and several. This is an important concept which means that if any one of those with a duty to carry out a programme is unable to do so, the other interested parties will be responsible for the defaulting party’s burden. Under section 30 of the Act, OPRED may also serve a section 29 notice on other parties, including a parent or associated companies of a licensee. Typically, OPRED will utilise this wider class of parties if it is of the view that the decommissioning arrangements proposed by the operator and licensees are unsatisfactory.

Furthermore, under section 34 of the Act (often referred to as the “claw-back” power), OPRED may place a duty to carry out a decommissioning programme on:

- parties that were previously released from a notice; and
- any person on whom notices could have been served since the serving of the first section 29 notice. This would include a parent company and other associated companies.

Licensees are required to obtain various approvals before commencing any decommissioning work.

12. **What is the regulatory regime that applies to the construction and operation of offshore and onshore oil and gas pipelines?**

For offshore pipelines, a Pipeline Works Authorisation (PWA) must be applied for under the Petroleum Act. For most onshore pipelines, the permitting process requires an authorisation under the Pipe-lines Act 1962. In all cases, there will be various other requirements and consents that need to be obtained, including environmental consents.
13. **What is the regulatory regime that applies to LNG liquefaction and LNG receiving terminals? Are there any such terminals in your jurisdiction?**

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14. **What is the regulatory regime that applies to gas storage (not LNG)? Are there any gas storage facilities in your jurisdiction?**

The UK also has a number of underground commercial gas storage facilities, in the form of depleted gas fields and onshore salt cavity storage, totalling to approximately 1.3 bcm capacity.

A different regulatory regime applies to the development of gas storage projects, depending on whether the project is onshore or offshore. A third-party access regime, as described in question 13 above, also applies.

The Energy Act 2008 created a new offshore gas storage licensing regime in relation to gas storage and recovery of stored gas, or unloading of gas to installations or pipelines within the offshore area (as mentioned in relation to LNG, in question 13 above). In addition, offshore gas storage facilities also require a contractual grant of rights (in the form of a lease or authorisation) from the Crown Estate under the Crown Estate Act 1961.

For onshore gas storage projects, one permitting route is under section 4 of the Gas Act 1965, which provides for licensed gas transporters to obtain a storage authorisation order from the Secretary of State in order to develop or use underground natural porous strata for the storage of gas. The more usual permitting route for onshore gas storage projects is under the Planning Act 2008.

Health and safety and environmental requirements will also apply. Where a depleted gas reservoir is being converted into a gas storage facility, a petroleum licence is also likely to be required.

15. **Is there a gas transmission and distribution system in your jurisdiction? How is gas distribution and transmission infrastructure owned and regulated? Is there a third party access regime?**

All gas in Great Britain (GB) is transported through the national transmission system (NTS), which is a network of high-pressure gas pipelines. The NTS is owned and operated by National Grid Gas plc (NGG). Gas which has been transported through the NTS is then distributed to end users through lower-pressure gas distribution networks. There are eight
regional distribution networks in GB, owned by a number of different companies. In addition, there are a number of smaller networks owned and operated by Independent Gas Transporters (ITGs), most of which have been built to serve new housing and industrial parks.

All companies who own and operate a gas transmission or distribution system are required to hold a gas transporter licence issued under the Gas Act 1986 (Gas Act). Because gas transmission and distribution are monopoly activities, they are subject to a high level of regulation under the Gas Act, the licence conditions and network codes (see also question 18 below). The regime requires the owners of the infrastructure to provide third party access and there is also a system of price controls to regulate the revenue that gas transmission and distribution system owners are allowed to collect.

16. **Is there a competitive and privatised downstream gas market or is gas supplied to end-customers by one or more incumbent/government-owned suppliers? Can customers choose their supplier?**

The GB downstream gas market was privatised in the 1980s. All segments of the market are in private ownership, and the market is open to full competition, with customers able to switch their supplier.

17. **How is the downstream gas market regulated?**

The Gas Act 1986 (Gas Act), as amended and supplemented by various legislation, including the Utilities Act 2000 and the Electricity and Gas (Internal Markets) Regulations 2011, among others, establishes the regulatory framework for the downstream gas sector in Great Britain. Northern Ireland has its own separate gas market and regulatory regime. The regime established under the Gas Act is administered and enforced by the Office of Gas and Electricity Markets (Ofgem) – the regulator for the gas and electricity markets.

The regulatory regime under the Gas Act is founded on a licensing system, which provides that certain key activities cannot be undertaken without a licence, or, in some instances, an exemption from the requirement to hold a licence. In GB, it is an offence (punishable by a fine) for a person to engage in the relevant activities without a licence or an exemption (as applicable). The relevant activities are as follows:

- gas distribution and transmission, which require a gas transporter licence. A gas transporter licence authorises the licensee (a gas transporter) to convey gas through pipelines to any premises within an area specified by the licence;
- gas shipping, which requires a gas shipper licence. A gas shipper licence authorises the licensee (a gas shipper) to contract with a gas transporter for gas to be introduced into, conveyed by means of, or taken out of a pipeline system operated by that gas transporter either generally or for purposes connected with the supply of gas to any premises specified in the licence. For example, many gas suppliers hold a gas shipper licence to allow them to arrange for the physical transportation of the gas they buy and sell (unless
the gas shipping is carried out by a separate entity);
- the operation of a gas interconnector, which requires an interconnector licence. A gas interconnector licence authorises the licensee to convey gas into, or through, a gas interconnector or to make such an interconnector available for use for the conveyance of gas;
- gas supply, which requires a gas supply licence, and
- the provision of a smart meter communication service, which requires a smart meter communication licence.

Industry codes, which the licensees are required to comply with under the licence conditions, form another layer of regulation. The most important of these is the Uniform Network Code. In accordance with the terms of its gas transporter licence, each gas transporter is required to have in place a network code. A network code is a legal document which forms the basis of the arrangements between a gas transporter and the gas shippers whose gas it transports. Originally, when National Grid Gas owned all the distribution networks as well as the NTS, there was one main Network Code. Now that there are a number of different gas transporters who own the different distribution networks, new arrangements have been put in place by means of the Uniform Network Code (UNC). The way this works is that each individual gas transporter has a network code which, in accordance with the requirements of the gas transporter’s licence, incorporates the UNC. The UNC sets out the “business rules” for the use of the NTS, and therefore gas shippers who want to use the NTS to transport gas must accede to the UNC. Gas shippers do this by entering into a framework agreement for the purposes of giving effect to and binding themselves by the UNC. Independent gas transporters are also required by their licence terms to have a network code. The Independent Gas Transporter Uniform Network Code (iGT UNC) performs a similar role to the UNC.

18. *Have there been any significant recent changes in government policy and regulation in relation to the oil and gas industry?*

In June 2013, Sir Ian Wood was asked to lead an independent review to look at how economic recovery from the UKCS could be maximised. The Wood Review final report was published in February 2015. It emphasised the need for existing collaboration in the oil and gas sector to be extended across all areas, including production efficiency, rig sharing, more effective deployment of new technology, improved shut-down coordination, sharing access to key spares, and decommissioning. The UK Government, with support from industry, decided to implement the recommendations of the Wood Review, and amongst other things this led to the establishment of the OGA in 2015.

19. *What key challenges have been identified by the government and/or industry in relation to your jurisdiction’s oil and gas industry?*

Given that the UKCS is considered to be a “mature” oil and gas basin, a key challenge has been to maximise the recovery of the remaining oil and gas resources. This was the challenge that spearheaded the Wood Review mentioned in question 18 above. Since the
implementation of the Wood Review, the economic environment for the upstream oil and gas industry became more challenging, with a drop in the oil price. Therefore, the OGA has been working closely with industry to drive efficiency and reduce costs in all areas, including decommissioning.

The UK’s exist from the EU (Brexit) has also presented some challenges for the industry, given that as at November 2019, it is still unclear what agreement (if any) the UK will strike with the EU, and therefore there is remaining uncertainty about what tariffs and restrictions on the import of goods and services may apply post Brexit. However, the underlying regulatory regime for the oil and gas industry will not be impacted by Brexit in any substantial way.

20. **Are there any policies or regulatory requirements relating to the oil and gas industry which reflect/implement the global trend towards the low-carbon energy transition?**

In 2019 the UK Government amended the Climate Change Act 2008 to commit itself to a new carbon reduction target of “net zero” by 2050. All industry sectors, including the oil and gas industry, are expected to play a role in reaching this target. The UK oil and gas industry has already committed to reducing the emissions intensity of oil and gas production in the UK, by developing, testing and deploying the technologies required to reduce emissions. Government and industry are also exploring opportunities to re-purpose old infrastructure, such as offshore pipelines, for carbon capture, usage and storage (CCUS) and hydrogen – both of which are expected to play a role in the UK’s energy transition.