



## ECONOMY AND LABOUR MARKET

# Oil and Gas Production Statistics

2019

31 March 2021

This publication includes estimates of oil and gas production activity in Scotland (including Scottish adjacent waters). It reports production volumes, approximate sales income, operating costs and capital expenditure.

**Correction** (8 April 2021): A processing error was identified in the results originally released for natural gas production and sales revenue. The publication now includes the updated results, which are higher in 2019 than originally reported. We apologise for any inconvenience this has caused.

### Headline results



In 2019, the volume of oil and gas production in Scotland is estimated to have increased by 0.4% to 77.2 million tonnes of oil equivalent (mtoe), accounting for 82 per cent of the UK total.



In 2019, the approximate sales value of oil and gas produced in Scotland is estimated to have been £22.5 billion, a decrease of 11.5% compared to 2018. Operating expenditure (excluding decommissioning) is estimated to have been £7.5 billion in 2019, up 4.4% from the previous year. Capital expenditure is estimated to have increased by 17.0% to £6.1 billion in 2019, which is the first annual increase since 2014.

### About this release

This publication contains a brief summary of the latest calendar year results. The online tables include estimates for calendar years 1998-2019, financial years 1998-99 to 2018-19, and the quarterly estimates which underpin the annual totals up to the end of 2019.

All statistics in this publication are consistent with information published by the Department for Business, Energy and Industrial Strategy (BEIS) and the Oil and Gas Authority (OGA) for total UK oil and gas production, income and expenditure. This includes production from both offshore and onshore oil and gas fields. Estimates for Scotland are based on production data for each individual oil and gas field which is located in Scotland or Scottish adjacent waters.

This publication has been delayed from its usual release date in September due to the focus on other analysis, such as Monthly GDP statistics, during the COVID-19 pandemic. Further information about this publication can be found in the background notes on page 5.

## In 2019, oil and gas production in Scotland increased by 0.4% compared to 2018

In 2019, total oil and gas production in Scotland (including Scottish adjacent waters) is estimated to have been 77.2 million tonnes of oil equivalent (mtoe). This was an increase of 0.4% compared to 2018, and accounted for 82 per cent of total UK production.

### Scottish Oil and Gas Production Volumes (mtoe) and Annual Change (%)

	Crude Oil & NGL		Natural Gas		Total Oil & Gas	
<b>2016</b>	49.2	+4.5%	25.6	+17.4%	74.8	+8.5%
<b>2017</b>	48.8	-0.9%	24.7	-3.6%	73.5	-1.8%
<b>2018</b>	52.8	+8.3%	24.0	-2.7%	76.9	+4.6%
<b>2019</b>	54.0	+2.2%	23.2	-3.5%	77.2	+0.4%

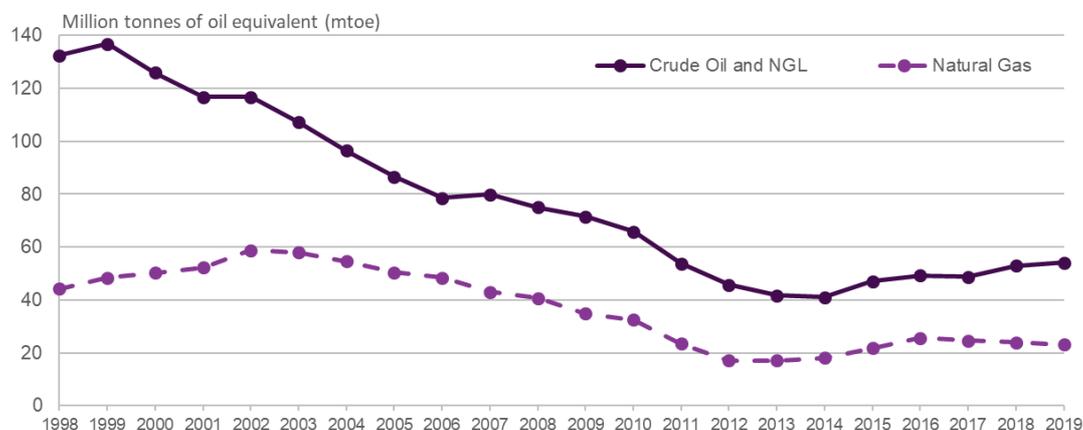
Note: More information is available in the online table 1.1

Around 70% of total oil and gas production in Scotland is of crude oil and natural gas liquids (NGL). In 2019, production of crude oil and NGL increased by 2.2% to 54.0 mtoe, and is now back to its highest level since 2010. However, production remains substantially below the peak level of 136.9 mtoe reached in 1999.

Natural gas production in Scotland accounts for around 30% of total oil and gas production. In 2019, gross production<sup>1</sup> of natural gas decreased by 3.5% to 23.2 mtoe. Gas production has fallen back in the last three years after increasing sharply in 2015 and 2016. The peak level for gas production in Scotland was 58.9 mtoe in 2002, three years later than the peak for crude oil and NGL.

Detailed production data can be visualised and downloaded directly from the [Oil and Gas Authority](#).

### Oil and Gas Production Volumes in Scottish Adjacent Waters



<sup>1</sup> Gross production includes waste and producers' own use, but excludes gas flared.

## Approximate sales income from oil and gas decreased by 11.5% compared to 2018

In 2019, the approximate sales value of oil and gas produced in Scotland is estimated to have been £22.5 billion, accounting for 90 per cent of the UK total. The Scottish proportion of approximate sales income is higher than the production share (82%) because prices for crude oil and NGL are generally higher than for gas. The approximate sales revenues have decreased in the latest year due to the small increase in production being offset by falling prices during 2019.

### Scottish Oil and Gas Summary Income and Expenditure (£ million)

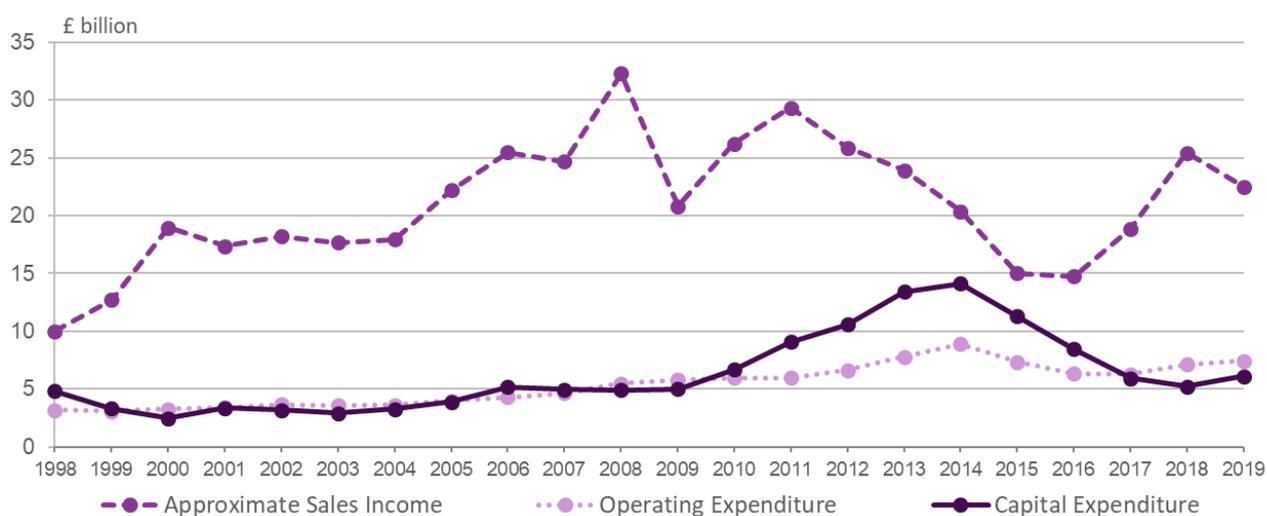
	Approx. Sales Income		Operating Expenditure		Capital Expenditure	
<b>2016</b>	14,748	-1.7%	6,332	-13.6%	8,469	-25.1%
<b>2017</b>	18,872	+28.0%	6,296	-0.6%	5,943	-29.8%
<b>2018</b>	25,420	+34.7%	7,137	+13.4%	5,216	-12.2%
<b>2019</b>	22,498	-11.5%	7,452	+4.4%	6,100	+17.0%

Note: More information is available in the online table 2.1

Operating expenditure on oil and gas extraction in Scotland is estimated to have been £7.5 billion in 2019, up 4.4% from the previous year. It should also be noted that these values do not include decommissioning costs.

Capital expenditure in Scottish adjacent waters is estimated to have increased by 17.0% to £6.1 billion in 2019, which is the first annual increase since 2014.

### Oil & Gas Income and Expenditure in Scottish Adjacent Waters



## The change in sales revenue since 2018 is due falling prices

In 2019, oil and gas production in Scottish adjacent waters is estimated to have increased by 0.4% compared to 2018. At the same time, the approximate sales value of Scottish oil and gas decreased by 11.5%, due to a drop in prices. The indicative average oil and gas price (the implied price, estimated per tonne of oil equivalent) fell by nearly 12% between 2018 and 2019, which was the first drop since 2016.

Changes in Price, Volume and Approximate Sales Income (%)



Over time, changes in sales value depends on a combination of changes in prices and production volumes. In many years since 2000 there was an increase in sales income, despite falling production, because of increasing oil and gas prices. More recently the opposite situation occurred, as stable or increasing production volumes during 2014-2016 were outweighed by falling prices. After the collapse in the oil price in 2014 and 2015, prices recovered during 2017 and 2018, but fell back slightly in 2019.

## Background Notes

The Department for Business, Energy & Industrial Strategy (BEIS) and the Oil & Gas Authority (OGA) produce regular updates to UK oil and gas statistics and should always be referred to as the primary source for UK totals. The results in this publication are consistent with:

- [Digest of UK Energy Statistics \(DUKES\) 2020](#)
- [Quarterly Energy Trends: \(December 2020 release\)](#)
- [Income from and expenditure on UKCS exploration, development and operating activities: annually 1970-2019](#)

## Tables

A full set of background tables can be accessed from the online version of this publication, including calendar year, financial year, and quarterly results for activity in Scotland (including small amounts of onshore activity in some years) and also expressed as a share of total UK activity.

## Methodology and User Guide

Further information on the Oil and Gas Production statistics is provided in the methodology paper published at <https://www.gov.scot/publications/oil-and-gas-statistics-methodology-guide/>

## Production units

The production data published by BEIS is presented in various volumetric, mass and energy units. BEIS report crude oil and NGL in tonnes, and natural gas in both GWh and standard cubic metres (the amount of gas in a cubic metre at standard conditions – temperature of 15 C°, and pressure of 1.01325 bars).

In this publication all estimates are converted into the standard energy unit of tonnes of oil equivalent (toe) to allow for comparison between liquids and gases. A tonne of oil equivalent is the amount of oil, gas or NGL equivalent to 11,630 kWh or 41.868 GJ.

The following factors can be used for approximate conversion to TOE.

Crude Oil: 1 tonne = 1.09 toe

NGL: 1 tonne = 1.16 toe

## Industry income and expenditure

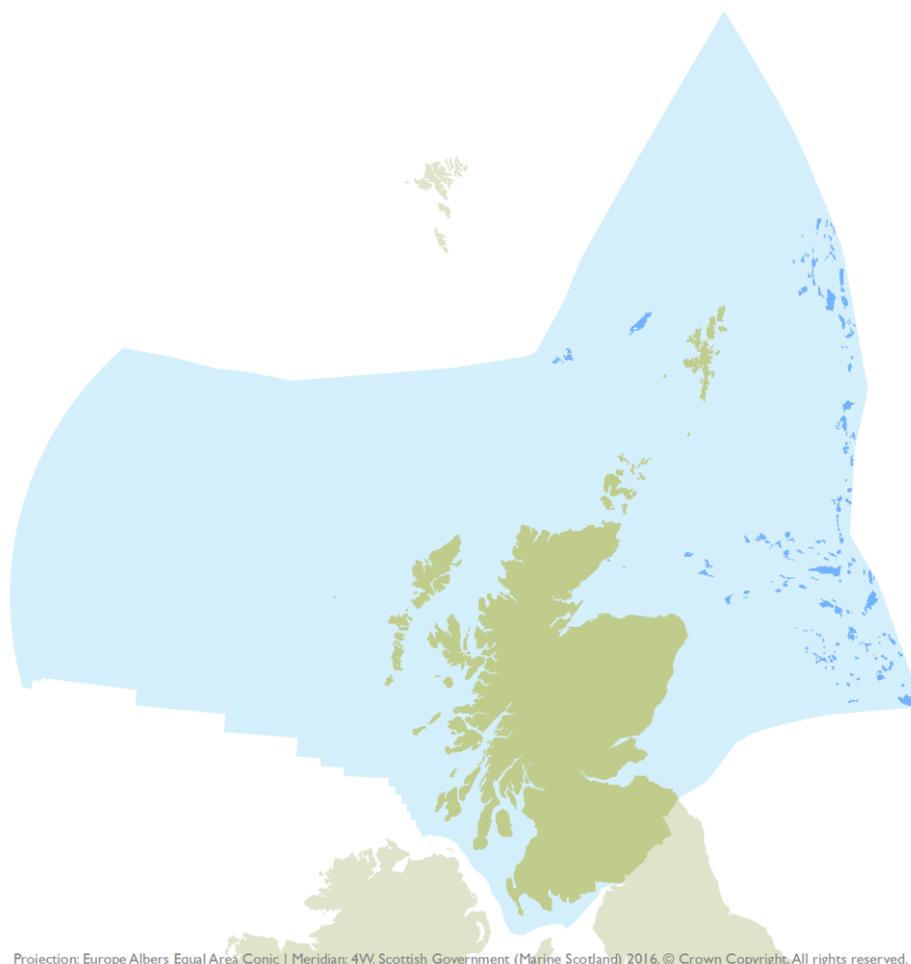
The OGA publishes annual estimates of production revenue (approximate sales income), operating costs and capital expenditure for the UKCS based on an annual survey of extraction companies. Field level data on operating revenues and expenditure are not published. Instead, estimates of commercial activity arising from activities in Scottish adjacent waters are modelled using commercially sourced analytical data.

In this publication, approximate sales income represents the market value of oil and gas at the time of production and is not based on actual company sales data. In reality, oil and gas is generally traded with complex pricing structures, but the approximate sales income estimates are indicative of levels and trends.

## Scottish Adjacent Waters

Estimates for the Scottish zone of the UK Continental Shelf (UKCS) are based on activities within the Scottish adjacent waters boundary, which was defined for the devolution of marine policy in the Scottish Adjacent Waters Boundary Order (1999).

### Oil and Gas Fields in Scottish Adjacent Waters



The Scottish Government uses this zone in economic statistics which include estimates of Scottish offshore activity, including the GDP Quarterly National Accounts and Government Expenditure & Revenue Scotland (GERS). For economic statistics it has become known as the 'illustrative geographical share' of UK offshore or extra-regio activities. The use of alternative boundaries is possible.

### Uses of these statistics

The data in this release are used in the production of other related statistics, including annual [commodity balances](#) and energy balances reported in the [Annual Compendium Of Scottish Energy Statistics](#). The data are also a key input to the experimental [supply and use satellite accounts for extra-regio economic activities](#) which have been being developed to extend the national accounts to include consistent estimates of offshore output and trade.

The results are also used by the Office for National Statistics as a data source for the production of [Regional Gross Value Added](#) statistics for the UK.

## An Official Statistics publication for Scotland

These statistics have not been assessed by the Office for Statistics Regulation and are therefore not yet been designated as National Statistics.

Official and National Statistics are produced to high professional standards set out in the Code of Practice for Statistics. Both undergo regular quality assurance reviews to ensure that they meet customer needs and are produced free from any political interference.

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## Complaints and suggestions

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