

**Documentation of statistics for
Price of North Sea oil 2023**

1 Introduction

These statistics show an average price for North Sea oil sold, that reflects the characteristics applied to oil production in the Danish part of the North Sea. These statistics are produced and disseminated as part of the Hydrocarbon Tax Act and were first published in 2023 with figures for 2022.

2 Statistical presentation

These statistics provide annual figures with the yearly average of the prices of the North Sea oil sold, quoted in US dollars (USD).

2.1 Data description

These statistics presents the average price of North Sea oil.

2.2 Classification system

Not relevant for these statistics.

2.3 Sector coverage

Not relevant for these statistics.

2.4 Statistical concepts and definitions

Dated Brent: Dated Brent is mixed North Sea crude oil. Brent was originally an oil field in the North Sea, but now the term is used for a mixture of crude oil produced from the Fories, Oseberg, Ekofisk and Troll fields. At S&P Global Commodity Insights, Dated Brent is the term for a load of North Sea-Brent mixed crude oil that has been assigned a delivery date.

PCAASoo: A classification of Dated Brent from S&P Global Commodity Insights. PCAASoo is used as a designation for the reference price for physical deliveries of North Sea oil, and is calculated on the basis of trades that have actually been made in the market with delivery 10 to 30 days ahead off Dated Brent. PCAASoo reflects the tradeable value at 16:30 London time.

2.5 Statistical unit

Barrel of oil

2.6 Statistical population

Oil production in the Danish part of the North Sea

2.7 Reference area

Denmark.

2.8 Time coverage

The statistics covers 2022 and onwards.

2.9 Base period

Not relevant for this statistics

2.10 Unit of measure

US dollars (USD) per barrel of oil.

2.11 Reference period

Income year.

2.12 Frequency of dissemination

Yearly.

2.13 Legal acts and other agreements

Statistics Denmark is obliged to collect and publish these statistics as a result of the Hydrocarbon Tax Act § 20 J subsection 4.

2.14 Cost and burden

Price data is provided by S&P Global Commodity Insights, so there is no reporting burden in connection with the production of these statistics.

2.15 Comment

Further information can be found on the subject page for [energy prices](#) or by contacting Statistics Denmark.

3 Statistical processing

Price data for sold North Sea oil is collected annually. Statistics Denmark validates data including checking that there is data for all trading days. Statistics Denmark then uses the published reference price (PCAASoo) as the basis for calculating the average crude oil price during the year. The calculation is made as a simple average of the daily-published reference prices.

3.1 Source data

Every year, Statistics Denmark obtains prices for Dated Brent from S&P Global Commodity Insights, which is a supplier of information for energy and commodity markets, as well as a source of benchmark price assessments for physical commodities.

The obtained Dated Brent crude oil price from S&P Global Commodity Insights has the classification PCAASOO and is a crude oil price from five weighted oil fields in the North Sea; Brent, Forties, Oseberg, Ekofisk, and Troll and from June 2023, WTI Midland oil from the USA is also included.

S&P Global Commodity Insights makes a weighting of the physical trades with deliveries in 10 to 30 days, based on price including delivery costs and quality differences of crude oil for the five fields and WTI Midland oil. The Dated Brent oil price from S&P Global Commodity Insights covers the price of North Sea oil and is calculated in USD. The price covers the crude oil price, specifically on trading days at 16:30 London time.

3.2 Frequency of data collection

Yearly.

3.3 Data collection

Price data is collected via a system-to-system solution.

3.4 Data validation

Price data is checked for missing prices on trading days and any data errors before calculation and publication.

3.5 Data compilation

S&P Global Commodity Insights Dated Brent PCAASOO is calculated as a weighting of five different oil fields in the North Sea, where they are weighted to a total price based on, among other things, price, delivery costs and quality differences of oil for the five fields and WTI Midland oil. Statistics Denmark then uses the published reference price (PCAASOO) as the basis for calculating the average crude oil price during the year. The calculation is made as a simple average of the daily published reference prices.

3.6 Adjustment

No corrections are made in the statistics.

4 Relevance

The statistics are relevant to SKAT as a basis for hydrocarbon taxation, which is described in more detail in the Hydrocarbon Tax Act.

4.1 User Needs

The statistics is used by SKAT in connection with hydrocarbon taxation.

4.2 User Satisfaction

The statistics and the method used is defined in the Hydrocarbon Tax Act, the method is prepared in collaboration between Statistics Denmark and SKAT, as supplier and primary user.

4.3 Data completeness rate

Not relevant for these statistics.

5 Accuracy and reliability

The use of the oil price collected from S&P Global Commodity Insights, PCAASoo, as well as the calculation of the annual price as a simple average, is specifically mentioned in the comments to the Hydrocarbon Tax Act, the price's precision and representativeness for Danish North Sea oil is affected both by which fields are incorporated into the price for North Sea oil and how S&P Global Commodity Insights makes quality adjustments.

5.1 Overall accuracy

The statistical precision depends on how well the reported price (PCAASoo) for North Sea oil from S&P Global Commodity Insights represents the sold production of oil in the Danish part of the North Sea. This representativeness is affected both by which fields are incorporated into the price for North Sea oil and how S&P Global Commodity Insights makes quality adjustments.

Statistics Denmark assesses, at least annually, with the help of an expert group consisting of the Nordsøfonden (the Danish State Subsurface Resource Company) and the the Danish Energy Agency, the representativeness of PCAASoo for production in Danish part of the North Sea oil. The expert group has assessed that the incorporation of WTI Midland from June 2023 does not decrease representativeness but rather enhances it.

5.2 Sampling error

Not relevant for these statistics.

5.3 Non-sampling error

The primary uncertainty lies in PCAASoo's representativeness in relation to oil production in the Danish part of the North Sea. This uncertainty lies, among other things, in in the choices in relation to the calculation S&P Global Commodity Insights makes when calculating PCAASoo. Furthermore, the annual average calculated by Statistics Denmark is a simple average that does not take into account how large quantities have been sold on the individual days.

5.4 Quality management

Statistics Denmark follows the recommendations on organisation and management of quality given in the Code of Practice for European Statistics (CoP) and the implementation guidelines given in the Quality Assurance Framework of the European Statistical System (QAF). A Working Group on Quality and a central quality assurance function have been established to continuously carry through control of products and processes.

5.5 Quality assurance

Statistics Denmark follows the principles in the Code of Practice for European Statistics (CoP) and uses the Quality Assurance Framework of the European Statistical System (QAF) for the implementation of the principles. This involves continuous decentralized and central control of products and processes based on documentation following international standards. The central quality assurance function reports to the Working Group on Quality. Reports include suggestions for improvement that are assessed, decided and subsequently implemented.

5.6 Quality assessment

The quality of the statistics is assessed based on its purpose and definition in the Hydrocarbon Tax Act.

5.7 Data revision - policy

Statistics Denmark revises published figures in accordance with the [Revision Policy for Statistics Denmark](#). The common procedures and principles of the Revision Policy are for some statistics supplemented by a specific revision practice.

5.8 Data revision practice

Only final figures are published.

6 Timeliness and punctuality

The statistics are published 15 days after the end of the year, i.e. no later than February 15. The statistics are published without delays in relation to planned publication times.

6.1 Timeliness and time lag - final results

The statistics are published 15 days after the end of the year. Only final figures are published.

6.2 Punctuality

The statistics are published annually without delay in relation to the previously announced publication time in the publication calendar.

7 Comparability

These statistics will be published for the first time in 2023, and the statistics are prospectively comparable to previous years. The representativeness of the collected price data is continuously assessed by Statistics Denmark and an expert group consisting of the Nordsøfonden and the Energy Agency.

7.1 Comparability - geographical

Norway and Great Britain also publish a price for North Sea oil. The statistics are not identical and there may be methodological or source differences in the statistics. These statistics can be found at the following links:

- Norway: [Petroleum Price Board and the norm prices - regjeringen.no](http://regjeringen.no)
- Great Britain: [Statutory market values for oil - GOV.UK \(http://www.gov.uk\)](http://www.gov.uk)

7.2 Comparability over time

In connection with the selection of the collected North Sea oil price from S&P Global Commodity Insights, PCAASoo, Statistics Denmark has collaborated with an expert group consisting of members from the Nordsøfonden (the Danish State Subsurface Resource Company) and the the Danish Energy Agency, to ensure that PCAASoo is representative of the price of oil in the Danish part of the North Sea. The expert group is consulted annually to ensure continued representativeness of the selected award. It has been assessed by the expert group that the incorporation of WTI Midland in June 2023 does not make PCAASoo less representative; rather, it enhances its representativeness. Therefore, PCAASoo remains comparable to previous years.

7.3 Coherence - cross domain

Not relevant for these statistics.

7.4 Coherence - internal

Not relevant for these statistics.

8 Accessibility and clarity

The statistics are published annually in the statistics bank under environment and energy

8.1 Release calendar

The publication date appears in the release calendar. The date is confirmed in the weeks before.

8.3 User access

Statistics are always published at 8:00 a.m. at the day announced in the release calendar. No one outside of Statistics Denmark can access the statistics before they are published.

8.2 Release calendar access

The Release Calendar can be accessed on our English website: [Release Calendar](#).

8.4 News release

There is no separate news release for this statistic.

8.5 Publications

The statistics are not included in any publications from Statistics Denmark.

8.6 On-line database

The statistics are published in the StatBank in the following table:

- [OLIEPRIS](#): Average price off North Sea oil by unit

8.7 Micro-data access

Not relevant for these statistics.

8.8 Other

The statistics are not published elsewhere.

8.9 Confidentiality - policy

[Data Confidentiality Policy](#) for Statistics Denmark is applied.

8.10 Confidentiality - data treatment

The statistics are published at a level of detail that does not necessitate discretions.

8.11 Documentation on methodology

Not relevant for these statistics.

8.12 Quality documentation

Results from the quality evaluation of products and selected processes are available in detail for each statistics and in summary reports for the Working Group on Quality.

9 Contact

The administrative placement of these statistics is in the division of Prices and Consumption. The contact person is Andreas Strøander Pedersen, tel.: + 45 2325 0078, and e-mail: APD@dst.dk.