

› eex group

EEX Group DataSource
SFTP - Specifications

28.06.2021
Leipzig

Version 001

Internal

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1. Document History

| Version | Description | Date | Author |
|---------|--|-----------|--------------------------------|
| 001 | initial version | 25.6.2021 | Hans Niklas Heil, Thomas Haupt |
| 002 | Update to white listing for IP addresses | 17.9.2021 | Thomas Haupt |

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2. List of Abbreviations

| Abbreviation | Explanation |
|--------------|---|
| ASCII | The American Standard Code for Information Interchange is a character-encoding scheme based on the ordering of the English alphabet |
| CER | Certified Emission Reductions |
| CEST | Central European Summer Time |
| CET | Central European Time |
| CR | The carriage return (CR) is one of the control characters in ASCII code, Unicode or EBCDIC that commands a printer or other sort of display to move the position of the cursor to the first position on the same line |
| CSV | The Comma-separated values (CSV) file is used for the digital storage of data structured in a table of lists form |
| EBCDIC | The Extended Binary Coded Decimal Interchange Code (EBCDIC) is an 8-bit character encoding (code page) used on IBM mainframe operating systems |
| EEX | European Energy Exchange |
| EUA | European Emission Allowances |
| EUAA | European Aviation Allowances |
| FTP | The File transfer protocol (FTP) is a standard network protocol used to exchange and manipulate files over a TCP/IP based network |
| IBM | The International Business Machines Corporation (IBM) is a multinational computer technology and IT consulting corporation |
| ISO | The International Organization for Standardization (ISO) is an international-standard-setting body composed of representatives from various national standards organizations |
| kWh | The watt-hour, or kilowatt-hour, (symbol kW·h, kWh) is a unit of energy equal to 3,600,000 joules. Energy in watt-hours is the multiplication of power in watts and time in hours |
| LF | A line feed (LF) or newline, also known as a line break or end-of-line (EOL) character, is a special character or sequence of characters signifying the end of a line of text |
| MW | Mega Watt = 1.000.000 W (refer to W) |
| MWh | Mega Watt Hour = 1.000 kWh (refer to kWh) |
| p | pence |
| SFTP | The Secure File Transfer Protocol (also SSH File Transfer Protocol) is a network protocol that provides file access, file transfer, and file management functionalities over any reliable data stream. The EEX FTP (sftp.datasource.eex-group.com) uses the Secure File Transfer Protocol |

| | |
|----------|---|
| ST | Short tonnes |
| thm | Therms |
| UTC | Coordinated Universal Time, (French Temps universel coordonné) |
| TradeReg | Service provided by the exchange which enables the trading participants and the trade registration participants to conclude transactions through registration by mutual agreement or to have over-the-counter transactions registered. Products for which trade registration is offered are usually specified in the Contract Specifications of the exchange and in the Trade Registration Contract Specifications. |
| VTP | Virtual Trading Point |
| W | The watt (symbol: W) is a derived unit of power in the International System of Units (SI). It measures rate of energy conversion |
| XLSX | Excel format is the native format of Microsoft Excel. The files of this format usually have xlsx extension |
| XML | The Extensible Markup Language (XML) is used for the digital storage of structured data |

3. Management Overview

To facilitate the energy markets and to support market participants EEX providing EEX Group DataSource, formerly referenced to as Info-Products. The EEX Group DataSource outlines details about day-to-day market data, historical data as well as indices, fundamental supply and demand details of power and natural gas. Subscribers can access electronic data for a variety of products of the spot and derivatives markets (e.g. power, natural gas, emission rights, coal, metals, freight, environmentals & agricultural). Furthermore, transparency data (i.e. fundamental energy production and consumption) relating to the energy market is published.

In addition to the data freely available at the websites of EEX and EEX Gas, EEX Group DataSource provides its commercial offering of computer readable files in both CSV and XLSX format hosted on an sFTP-server (datasource.eex-group.com). Additionally, transparency data can be obtained in csv file format.

The files are designed for easy processing and can be used by customers for market analysis, pricing and any other analytics. The published CSV files are mainly stored in daily files, which enable electronic platforms to integrate data easily. Excel files mostly provide annual information to give a quick overview and analysis. This document describes the CSV files in detail.

Files are published daily after the market is closed and data is completed. Updates after the initial file creation can happen if necessary, based on corrections or additional content becoming available after initial creation.

All detailed information about the actual contract specifications can be found at the EEX website under the following location: <https://www.eex.com/en/markets/trading-ressources/contract-details-product-codes>

Data which is licensed for internal purposes can be ordered via the EEX Group online shop.

If you want to publish or redistribute the data as part of your own services to your customers, a Vendor-License is needed. For a Vendor-License please contact us directly at datasource@eex-group.com to discuss your needs and coverage requirements.

In the following chapters the files and their contents will be described. First, all conventions will be defined, hence included data formats are introduced. Later in the document the actual data elements included in each file type are defined. After that a listing of the files using each type of file layout is provided along with general information like the download location and further information links.

4. General remarks

This file will provide you with a high-level overview and technical specifications for our sFTP details on path; files and what information a file contains is not included in this specification. You can find this level of detail in [DataSource sFTP files overview and specification.xlsx](#) which is available in the same download location as this file.

4.1 Exchange trading days at EEX and EEX Gas

Detailed calendars with all the specific holidays are provided on EEX homepage under <https://www.eex.com/en/markets/trading-ressources/calendar>

All EEX derivatives Products and Emission Spot

Exchange days are all normal working days (Monday to Friday) except for holidays – the general days that will be repeated holidays each year are listed below.

| Holidays at EEX |
|--------------------------------|
| New Year – 1st January |
| Good Friday |
| Easter Monday |
| Labour Day – 1st May |
| Christmas Eve – 24th December |
| Christmas Day – 25th December |
| Boxing Day – 26th December |
| New Year's Eve – 31st December |

Natural Gas data provided via the EEX Gas Platform

Exchange days are all normal working days (Monday to Friday) except for holidays – the general days that will be repeated holidays each year are listed below.

| Holidays at EEX Gas (Futures) |
|-------------------------------|
| New Year – 1st January |
| Good Friday |
| Easter Monday |
| Labour Day – 1st May |

Commented [HHH1]: Haben EEX Gas und ehemals Powernext die gleichen Holiday trade pausen?

| |
|--|
| Early May Bank Holiday – first Monday of May |
| Spring Bank Holiday – last Monday of May |
| Summer Bank Holiday – last Monday of August |
| Christmas Day – 25 th December |
| Boxing Day – 26 th December |

| Holidays at EEX Gas (SPOT) |
|--|
| New Year – 1 st January |
| Good Friday |
| Easter Monday |
| Early May Bank Holiday – first Monday of May |
| Spring Bank Holiday – last Monday of May |
| Summer Bank Holiday – last Monday of August |
| Christmas Day – 25 th December |
| Boxing Day – 26 th December |

4.2 sFTP server access

You require an dedicated sFTP tool to access the sFTP server like WinSCP (<https://winscp.net/>) or filezilla (<https://filezilla-project.org/>).

For accessing the sFTP server, please use the provided log-in data.

Username (EEX_XXXX) and password were sent to all migrated customers from mis.eex.com in February 2019 and will be sent to new customers within the next 2 working days after placing the order.

- Server: datasource.eex-group.com
- Port: 22
- Username: EEX_XXXX
- Password: password

Important Notice: Please remember to select the encoded protocol “sftp” and to adjust your proxy and firewall settings.

4.3 IP Adresses

The domain sftp://datasource.eex-group.com can be routed to IP addresses within following ranges.

- 159.100.199.0/24
- 45.126.246.0/24
- 159.100.207.0/24
- 206.155.48.0/24
- 161.38.176.0/24

Please refrain from using the IP addresses directly. The domain will be routed to one of the IP addresses to balance the load of the servers!

4.4 Creation Time

All files are created within 3 hours after close of trading. For the majority of files this means they are created till 9pm CE(S)T, which is 7pm UTC in summertime and 8pm UTC in wintertime. In case of updates, files can be republished.

4.5 Sample files

Sample files are available under <https://www.eex.com/en/market-data/eex-group-datasource/sftp-server>

4.6 Known Issues and Bugs

- Publish unadjusted Open interest. No open interest is generated if there are 2 Trade registration trades which appear in case of 2 customers under one Broker/NCM swap their positions. Trades and volume under the trades are published but there is no open interest generated. Examples can be found in PowerFutureHistory_JP_Tokyo_2021.xlsx for FOBM on the 2.2.2021.

| Trading Day | Instrument | | | | | Settlement | | | Trade Registration | | |
|-------------|------------|----------|----------------|--------------|----------|------------------|----------------------|--------------------|--------------------|---------------|------------------|
| | Product | Maturity | Delivery Start | Delivery End | Lot Size | Settlement Price | Open Interest Volume | Open Interest Lots | Traded Lots | Traded Volume | Number of Trades |
| 2021-02-04 | FOBM | 2021-02 | 2021-03-01 | 2021-03-08 | 672 MWh | 9.85 JPY/MWh | 48 384 MWh | 72 | | | |
| 2021-02-04 | FOBM | 2021-03 | 2021-03-01 | 2021-03-31 | 744 MWh | 7.96 JPY/MWh | 17 112 MWh | 23 | | | |
| 2021-02-04 | FOBM | 2021-04 | 2021-04-01 | 2021-04-30 | 720 MWh | 6.61 JPY/MWh | | | | | |
| 2021-02-04 | FOBM | 2021-05 | 2021-05-01 | 2021-05-31 | 744 MWh | 6.61 JPY/MWh | | | | | |
| 2021-02-04 | FOBM | 2021-06 | 2021-06-01 | 2021-06-30 | 720 MWh | 7.13 JPY/MWh | | | | | |
| 2021-02-04 | FOBM | 2021-07 | 2021-07-01 | 2021-07-31 | 744 MWh | 6.91 JPY/MWh | | | | | |
| 2021-02-04 | FOBM | 2021-08 | 2021-08-01 | 2021-08-31 | 744 MWh | 8.35 JPY/MWh | | | | | |
| 2021-02-03 | FOBM | 2021-02 | 2021-02-01 | 2021-02-28 | 672 MWh | 10.25 JPY/MWh | 48 384 MWh | 72 | | | |
| 2021-02-03 | FOBM | 2021-03 | 2021-03-01 | 2021-03-31 | 744 MWh | 8.15 JPY/MWh | 17 112 MWh | 23 | | | |
| 2021-02-03 | FOBM | 2021-04 | 2021-04-01 | 2021-04-30 | 720 MWh | 6.97 JPY/MWh | | | | | |
| 2021-02-03 | FOBM | 2021-05 | 2021-05-01 | 2021-05-31 | 744 MWh | 6.97 JPY/MWh | | | | | |
| 2021-02-03 | FOBM | 2021-06 | 2021-06-01 | 2021-06-30 | 720 MWh | 7.45 JPY/MWh | | | | | |
| 2021-02-03 | FOBM | 2021-07 | 2021-07-01 | 2021-07-31 | 744 MWh | 6.76 JPY/MWh | | | | | |
| 2021-02-03 | FOBM | 2021-08 | 2021-08-01 | 2021-08-31 | 744 MWh | 9.19 JPY/MWh | | | | | |
| 2021-02-02 | FOBM | 2021-02 | 2021-02-01 | 2021-02-28 | 672 MWh | 10.25 JPY/MWh | 48 384 MWh | 72 | 2 | 1 344 MWh | 5 |
| 2021-02-02 | FOBM | 2021-03 | 2021-03-01 | 2021-03-31 | 744 MWh | 8.15 JPY/MWh | 17 112 MWh | 23 | | | |
| 2021-02-02 | FOBM | 2021-04 | 2021-04-01 | 2021-04-30 | 720 MWh | 6.69 JPY/MWh | | | | | |
| 2021-02-02 | FOBM | 2021-05 | 2021-05-01 | 2021-05-31 | 744 MWh | 6.69 JPY/MWh | | | | | |
| 2021-02-02 | FOBM | 2021-06 | 2021-06-01 | 2021-06-30 | 720 MWh | 7.17 JPY/MWh | | | | | |
| 2021-02-02 | FOBM | 2021-07 | 2021-07-01 | 2021-07-31 | 744 MWh | 8.76 JPY/MWh | | | | | |
| 2021-02-02 | FOBM | 2021-08 | 2021-08-01 | 2021-08-31 | 744 MWh | 9.19 JPY/MWh | | | | | |
| 2021-02-01 | FOBM | 2021-02 | 2021-02-01 | 2021-02-28 | 672 MWh | 9.66 JPY/MWh | 48 384 MWh | 72 | | | |
| 2021-02-01 | FOBM | 2021-03 | 2021-03-01 | 2021-03-31 | 744 MWh | 8.50 JPY/MWh | | | | | |
| 2021-02-01 | FOBM | 2021-04 | 2021-04-01 | 2021-04-30 | 720 MWh | 6.96 JPY/MWh | 17 112 MWh | 23 | | | |
| 2021-02-01 | FOBM | 2021-05 | 2021-05-01 | 2021-05-31 | 744 MWh | 6.96 JPY/MWh | | | | | |
| 2021-02-01 | FOBM | 2021-06 | 2021-06-01 | 2021-06-30 | 720 MWh | 7.87 JPY/MWh | | | | | |

- Negative settlement prices are not displayed (Power Futures only); field will be left blank.

- Monthly Power Futures-> last day of the month is at least 2 days after the last business day (trading day) the last settlement price will be amended on the next business day
- Trade cancellations and amendments are taken into account if done on the same trading day
Trade cancellations and amendments are not taken into account if done at any other date than the trading date.
- Short term derivatives (Days, Weeks and Weekends) that expire the month after the last trading day (e.g. DB32 – German Day Future), are shown with the maturity of the delivery month (e.g. 2019-06 for the June contract) instead of the maturity of the expiry month (e.g. 2019-07) as is it intended and set up in the trading system.
- In case just spread trade trades per contract took place on a trading day, the field "Timestamp Last Price" will be entered without having the according price and without the further three time stamps and prices.
- So called dummy values are settlement prices that are calculated for technical reason but are not meant to be published. These values of 0,01 and 0,001 are filtered out and won't be included in the file. Currently, all settlement prices with such values are filtered out – in rare cases even correctly settled prices at 0,01 or 0,001 – the field will be left blank.
- Fields Open, High, Low, Last in Future Result files do not take legs of spread trades into account.
- Spread Trades are not available. Currently we are unable to match the legs of spread trades. The only way to match them at the moment is via trade time stamp. This has the risk that we show a trade as a spread which is actually 2 individual trades that are performed at the same time.

5. Definitions

In the following chapter all needed definitions will be made. In a first step all conventions will be defined and in a second step all elements.

5.1 Definition of Used Data Types

The following table shows the used formats.

| Type | Description |
|------------|---|
| <date> | Date format – information of a point in time Please refer to ISO 8601 for a detailed description of the format used in XML. In CSV files, the following format is used: YYYY-MM-DD Examples: 2009-11-17 |
| <datetime> | Date and time format – information of a point in time Please note that all points in time are in local time CE(S)T. Please refer to ISO 8601 for a detailed description of the format used. Example: 2018-08-01T16:53:45 |
| <integer> | The range of all natural numbers including the zero |
| <float> | Floating-point number – all floating-point numbers will have a fraction with a denominator of ten. Example: 1400.4 |
| <string> | Alphanumeric string – used for text information Example: Off-Peak |
| <period> | A format like YYYY-MM that denotes the maturity of a contract – not a native data type, but a construct/format |

5.2 Definition of Data Fields

The following table will define all used fields.

| Fieldname | Description | Format | Example |
|----------------|--------------------------------------|-----------|----------|
| Auction Name | Name of the auction | <string> | EU |
| Auction Price | Price result of the auction | <float> | 12,36 |
| Auction Time | Time of the day the auction was held | <time> | 15:05:00 |
| Auction Volume | Volume auctioned | <integer> | 735450 |
| Average Price | Average hour price of a delivery day | <float> | 34,15 |

| Fieldname | Description | Format | Example |
|-----------------------|--|-----------|-----------------------------------|
| Code | Code of the product (Detailed information may be found in the contract detail file) | <string> | O1BM |
| Lot Size | Volume traded for the contract in the product's commodity unit | <integer> | 18100 |
| Country Revenue | Revenue per country of the auction | <integer> | AT:318600 |
| Cover Ratio | Cover ratio of the auction | <float> | 3,46 |
| Daily Reference Price | Daily reference price | <float> | 22,90 |
| Delivery Date | Day of delivery of the traded commodity | <date> | 2010-03-01 |
| Delivery End | Delivery end date of a contract | <date> | 2014-03-01 |
| Delivery Period | Delivery period of a future contract | <period> | 2010-01 |
| Delivery Start | Delivery start date of a contract | <date> | 2014-03-01 |
| Execution | Status of the execution of the block bids. | <string> | Y |
| Front Contract | Front contract of the index (YYYY-MM) | <period> | 2017-08 |
| Hour | Specific Hour | <string> | 04-05 |
| High Price | Highest prices of the trading day | <real> | 128,91 |
| Index | Specific Index ELIX, EGIX, ECarbix, monthly Index, APDD | <string> | |
| Index Type | Indicates if it is the arithmetic average price of all daily values for a given front month contract or the daily index (day or month) | <date> | |
| Last Price | Price of the last trade on the trading day | <real> | 45,95 |
| Limit Price | Limit price for the block bid. | <real> | 22,27 |
| Long Name | Plain text of the product code | <string> | Phelix-DE Base Month Future |
| Low Price | Lowest price of the trading day | <real> | 12,07 |
| Market Area | Name of the market area (Detailed information may be found in the contract specification). | <string> | CH |
| Maturity | Maturity of the contracts/products (Displays Month in which the delivery starts.) | <period> | 2017-04 |

| Fieldname | Description | Format | Example |
|---|---|-----------|------------|
| Maximum Bid | Maximum bid of the auction | <float> | 6,00 |
| Mean Price | Mean price of the auction | <float> | 5,54 |
| Median Price | Median price of the auction | <float> | 5,54 |
| Minimum Bid | Minimum bid of the auction | <float> | 5,54 |
| Number of Trades | Total number of trades per trading day | <integer> | 25 |
| Number of Lines | The number of lines a file has in total. | <integer> | 135 |
| Open Interest Contracts | Open Interest as number of contracts | <integer> | 234568 |
| Open Interest Lots | Open Interest as number of contracts/lots (Amount of traded lots). The number is a value of the previous day until the 23.09.11.2019. From the 23.09.11.2019 onwards the open interest reflects the current day value. | <integer> | 234568 |
| Open Interest Volume | Open Interest lots multiplied by lot size. | <integer> | 234568 |
| Open Price | Price of the first trade at an exchange market or the first registered traded price within business hours of ECC for trade registration (OTC). | <float> | 42,67 |
| Price (Index) | Market based reference price. The price is calculated | <float> | 42,38 |
| Product | Code of the product | <string> | O1BM |
| Settlement Price | A settlement price is determined for each individual contract which can be traded continuously or Trade Registration on EEX Power Derivatives and on the EEX Derivatives and Spot Markets every day. | <float> | 42,67 |
| Standard Deviation of Bid Volume Per Bidder | The standard deviation of bid volume per bidder | <integer> | 15 |
| Strike | Strike price of the option | <float> | 45,5 |
| Traded Lots | Number of traded contracts/lots | <integer> | 58 |
| Trade Date | Date of Trading | <date> | 2014-09-20 |

| Fieldname | Description | Format | Example |
|------------------------------------|---|--------------|---------------------|
| Traded Volume | Traded Contracts multiplied by contract volume | <integer> | 4200 |
| Timestamp High Price | Timestamp of trade with the highest price of the day | <date><time> | 2017-06-14T13:45:00 |
| Timestamp Low Price | Timestamp of trade with the lowest price of the day | <date><time> | 2017-06-14T11:45:00 |
| Timestamp Last Price | Timestamp of last trade of trading day | <date><time> | 2017-06-14T16:45:00 |
| Timestamp Open Price | Timestamp of first trade at an exchange market or the first registered traded price within business hours of EEC for trade reg. (OTC) | <date><time> | 2017-06-14T10:45:00 |
| Total Amount of Bids | Total amount of bids of the auction | <integer> | 8174000.00 |
| Total Number of Bids | Total number of bidders of the auction | <integer> | 16 |
| Total Number of Successful Bidders | Number of successful bidders of the auction | <integer> | 12 |
| Total Revenue | Total revenue of the auction | <float> | 11050700 |
| Type | Type of the option: call (C) or put (P) | <string> | C |
| Underlying | Underlying contract of the product (Detailed information may be found in the contract specification) | <string> | F1BQ |
| Volume | Volume traded for the contract | <integer> | 537189 |

5.2.1 Notes on Data

Data publication acts according following guidelines:

| |
|---|
| The instruments for days, weeks and months are published throughout the time of delivery. |
| For days of a weekend, weeks and weekends the instruments are additionally published the next working day after delivery. |
| Quarters, seasons and years are not published throughout delivery. |

5.2.2 Archived Data

All data published prior to 2019 can be found under the 'Archive' folders. This archived data does not match the files and specifications outlined in this documentation but instead follow former specifications relevant to these files.

6. CSV files

6.1 Definitions

6.1.1 General File Design

This document deals with the CSV file formatted information service. All lines are terminated with a carriage return <CR> and a line feed <LF>. The files can be viewed by using any text editor.

All lines start with a *line identifier* that specifies the type of data that follows. The lines are consisting of a number of *fields* (One field or several fields?) A semicolon separates fields. The fields have different meanings in the context of a line as described in the following sections of this document. In summary a line is described as a list of fields in the order they are presented in the file:

line identifier;field 1;field 2; ... ;field n<CR><LF>

6.2 File Layouts

6.2.1 General Remarks

This chapter provides the CSV templates that are used for several commodities. For example, futures are generally the same in terms of the information clients need to be able to process the data correctly. For this reason, they share a similar “template” in terms of the file format. So below are the lists of file formats that are used to provide data.

The first line of each file is the description line that is unique per file. Example: # Prices/Volumes of EEX Power Future Market Austria.

Each of the possible layouts is described below in the respective chapters 5.2 to 5.16.

6.2.2 Futures Results

| Line Description | Frequency |
|--|-----------|
| Comment lines describing the file format # Prices/Volumes of EEX Power Future Market Germany # # Data type(ST);Trading Date;Creation Time # Data type(PR);Product;Long Name;Maturity;Delivery Start;Delivery End;Open Price;Timestamp Open Price;High Price;Timestamp High Price;Low Price;Timestamp Low Price;Last Price;Timestamp Last Price;Settlement Price;Unit of Prices;Lot Size;Traded Lots;Number of Trades;Traded Volume;Open Interest Lots;Open Interest Volume;Unit of Volumes # Data type(OT);Product;Long Name;Maturity;Delivery Start;Delivery End;Lot Size;Traded Lots;Number of Trades;Traded Volume;Unit of Volumes | 7 |

| Line Description | Frequency |
|--|-----------|
| # Data type(AL);Number of Lines # | |
| Status line with Trading Date, Creation Time <i>ST;Trading Date;Creation Time</i> ST;2019-02-01;2019-02-04T01:23:08Z | 1 |
| Price and volume results lines for all contracts <i>PR;Product;Long Name;Maturity;Delivery Start;Delivery End;Open Price;Timestamp Open Price;High Price;Timestamp High Price;Low Price;Timestamp Low Price;Last Price;Timestamp Last Price;Settlement Price;Unit of Prices;Lot Size;Traded Lots;Number of Trades;Traded Volume;Open Interest Lots;Open Interest Volume;Unit of Volumes</i> PR;DEB2;Phelix-DE Base Week Future;2019-02;2019-02-04;2019-02-10;52,5;2019-02-01T08:26:33Z;52,5;2019-02-01T08:26:33Z;51,25;2019-02-01T12:50:16Z;51,75;2019-02-01T15:16:57Z;51,63;EUR/MWh;168;135;7;22680;2561;430248;MWh | 1-n |
| Trade Registration results line for all contracts <i>OT;Product;Unit;Delivery Period;Delivery Start;Delivery End;Contract Volume;Traded Volume;Traded Contracts;Number of Trades</i> OT;DB02;Phelix-DE Base Day Future short-term;2019-02;2019-02-02; 2019-02-02;24;325;13;7800;MWh | 1-n |
| Total number of lines containing information in the CSV file <i>AL;Number of Lines</i> AL;277 | 1 |

Note: Freight futures file applies the general futures file layout explained in chapter 5.2 except one difference. This file does not contain a settlement price field in PR-lines.

6.2.3 Option Results

| Line Description | Frequency |
|---|-----------|
| Comment lines describing the file format # Prices/Volumes of EEX Power Option Market France # # Data type(ST);Trading Date;Creation Time # Data type(PR);Product;Long Name;Underlying;Maturity;Delivery Start;Delivery End;Type;Strike;Open Price;Timestamp Open Price;High Price;Timestamp High Price;Low Price;Timestamp Low Price;Last Price;Timestamp Last Price;Settlement Price;Unit of Prices;Lot Size;Traded Lots;Number of Trades;Traded Volume;Open Interest Lots;Open Interest Volume;Unit of Volumes # Data type(OT);Product;Long Name;Underlying;Maturity;Delivery Start;Delivery End;Type;Strike;Lot Size;Traded Lots;Number of Trades;Traded Volume # Data type(AL);Number of Lines # | 7 |
| Status line with Trading Date, Creation Time ST;Trading Date;Creation Time ST;2019-01-21;2019-01-21T18:36:26Z | 1 |
| Price and volume results lines for all contracts PR; Product;Long Name;Underlying;Maturity;Delivery Start;Delivery End;Type;Strike;Open Price;Timestamp Open Price;High Price;Timestamp High Price;Low Price;Timestamp Low Price;Last Price;Timestamp Last Price;Settlement Price;Unit of Prices;Lot Size;Traded Lots;Number of Trades;Traded Volume;Open Interest Lots;Open Interest Volume;Unit of Volumes PR;O7BM;French Base Month Option;F7BM;2019-02;2019-02-01;2019-02-28;C;66;;;;;;;;;4.213;EUR/MWh;672;;;;;;;;;MWh | 1-n |
| OTC results line for all contracts OT;Product;Long Name;Underlying;Maturity;Delivery Start;Delivery End;Type;Strike;Lot Size;Traded Lots;Number of Trades;Traded Volume OT;O7BM;French Base Month Option;F7BM;2019-04;2019-04-01;2019-04-30;P;53.5;720;;;;;;;;;MWh | 1-n |
| Total number of lines containing information in the CSV file AL;Number of Lines AL;277 | 1 |

6.2.4 Gas Spot Market Results

| Line Description | Frequency |
|--|-----------|
| Comment lines describing the file format # Prices/Volumes of PEGAS Spot Market GASPOOL # # Data type(ST);Trading Date;Creation Time # Data type(PR);Market Area;Product;Long Name;Delivery Start;Delivery End;Open Price;Timestamp Open Price;High Price;Timestamp High Price;Low Price;Timestamp Low Price;Last Price;Timestamp Last Price;Unit of Prices;Number of Trades;Traded Lots;Traded Volume;Unit of Volumes # Data type(SP);Market Area;Long Name;Delivery Start;Delivery End;Settlement Price;Unit of Prices # Data type(IL);Market Area;Long Name;Delivery Start;Delivery End;Settlement Price;Unit of Prices # Data type(AL);Number of Lines # | 7 |
| Status line with Trading Date, Creation Time ST; Trading Date;Creation Time ST;2019-05-13;2019-05-14T01:15:12Z | 1 |
| Results line for EGSI Index IL;Market Area;Market Area;Long Name;Delivery Start;Delivery End;Settlement Price;Unit of Prices IL;GPL;EGSI;2019-05-14T04:00:00Z;2019-05-15T03:59:59Z;14,339;EUR/MWh | 1-n |
| Results line for Settlement Price products Market Area;Long Name;Delivery Start;Delivery End;Settlement Price;Unit of Prices SP;GPL;DAY 1 MW;2019-05-14T04:00:00Z;2019-05-15T03:59:59Z;14,387;EUR/MWh | 1-n |
| Results line for trade data Market Area;Product;Long Name;Delivery Start;Delivery End;Open Price;Timestamp Open Price;High Price;Timestamp High Price;Low Price;Timestamp Low Price;Last Price;Timestamp Last Price;Unit of Prices;Number of Trades;Traded Lots;Traded Volume;Unit of Volumes PR;GPL;GWID;WITHIN-DAY;2019-05-13T13:00:00Z;2019-05-14T03:59:59Z;14,525;2019-05- 13T09:23:05Z;14,7;2019-05-13T09:36:10Z;14,525;2019-05-13T09:23:05Z;14,525;2019-05- 13T09:52:04Z;EUR/MWh;8;534;8010;MWh | 1-n |
| Total number of lines containing information in the CSV file AL;Number of Lines AL;16 | 1 |

6.2.5 Emission Primary Auction Results

| Line Description | Frequency |
|--|-----------|
| <p>Comment lines describing the file format</p> <p># Prices/Volumes of EEX Emission Primary Market Auction</p> <p>#</p> <p># Data type(ST);Auction Date;Creation Time</p> <p># Data type(PR);Time;Auction Name;Contract;Status;Auction Clearing Price;Minimum Bid;Maximum Bid;Mean;Median;Unit Of Prices;Auction Volume;Total Volume Of Bids Submitted;Number Of Bids Submitted;Number Of Successful Bids;Average Number Of Bids Per Bidder;Average Bid Size;Average Volume Bid Per Bidder;Standard Deviation Of Bid Volume Per Bidder;Average Volume Won Per Bidder;Standard Deviation Of Volume Won Per Bidder;Cover Ratio;Total Number Of Bidders;Number Of Successful Bidders;Total Revenue</p> <p># Data type (CR);Time;Auction Name;Austria (AT);Belgium (BE);Bulgaria (BG);Cyprus (CY);Czech Republic (CZ);Germany (DE);Denmark (DK);Estonia (EE);Greece (EL);Spain (ES);Finland (FI);France (FR);Croatia (HR);Hungary (HU);Ireland (IE); Innovation Fund (IF);Italy (IT);Lithuania (LT);Luxembourg (LU);Latvia (LV); Modernization Fund (MF); Malta (MT); Netherlands (NL); Poland (PL);Portugal (PT); Romania (RO); Sweden (SE); Slovenia (SI); Slovakia (SK)</p> <p># Data type(AL);Number of Lines</p> <p>#</p> | 7 |
| <p>Status line with Publishing Date, Creation Time</p> <p>ST;Auction Date;Creation Time</p> <p>ST;2017-06-14;2017-06-14T19:45:00Z</p> | 1 |
| <p>Results line for Emission products</p> <p>PR;Time;Auction Name;Contract;Status;Auction Clearing Price;Minimum Bid;Maximum Bid;Mean;Median;Unit Of Prices;Auction Volume;Total Volume Of Bids Submitted;Number Of Bids Submitted;Number Of Successful Bids;Average Number Of Bids Per Bidder;Average Bid Size;Average Volume Bid Per Bidder;Standard Deviation Of Bid Volume Per Bidder;Average Volume Won Per Bidder;Standard Deviation Of Volume Won Per Bidder;Cover Ratio;Total Number Of Bidders;Number Of Successful Bidders;Total Revenue</p> <p>PR;2019-05-13T07:00:19Z;EU;T3PA;Successful;25,25;13,5;31;24,97;25,19;EUR/ICO2;2495000;4412500;86;36;3,74;51308;191848;232370;146765;182599;1,77;23;17;6299875019943820</p> | 1-n |
| <p>Results line for Country products</p> <p>CR;Time;Auction Name;Austria (AT);Belgium (BE);Bulgaria (BG);Cyprus (CY);Czech Republic (CZ);Germany (DE);Denmark (DK);Estonia (EE);Greece (EL);Spain (ES);Finland (FI);France (FR);Croatia (HR);Hungary (HU);Ireland (IE);Italy (IT);Lithuania (LT);Luxembourg (LU);Latvia (LV);Malta (MT);Netherlands (NL);Poland (PL);Portugal (PT);Romania (RO);Sweden (SE);Slovenia (SI);Slovakia (SK)</p> | 1-n |

| Line Description | Frequency |
|---|-----------|
| CR;09:00:00;19900000;486720;884520;800280;37440;1226160;435240;241020;1207440; 3009240;582660;1909440;163800;524160;327600;3360240;191880;42120;93600;35100; 1170000;613080 ;1600560;308880;154440;538200 | |
| Total number of lines containing information in the CSV file <i>AL; Number of Lines</i> AL;12 | 1 |

6.2.6 Emission Spot Secondary Market Results

| Line Description | Frequency |
|---|-----------|
| Comment lines describing the file format # Prices/Volumes of EEX Emission Secondary Spot Market # # Data type(ST);Trading Date;Creation Time # Data type(PR);Market Area;Product; Maturity; Long Name;Open Price;Timestamp Open Price;High Price;Timestamp High Price; Low Price;Timestamp Low Price;Last Price;Timestamp Last Price;Settlement Price;Unit of Prices;Lot Size;Traded Lots;Number of Trades;Traded Volume;Unit of Volumes # Data type(OT);Market Area;Product; Maturity; Long Name; Number of Trades;Traded Volume;Lot Size;Traded Lots;Unit of Volumes # Data type(AL);Number of Lines # | 7 |
| Status line with Publishing Date, Creation Time <i>ST; Trading Date; Creation Time</i> ST;2017-06-14;2017-06-14T19:45:00Z | 1 |
| Results line for Secondary Emission products <i>PR; Market Area; Product; Long Name; Open Price; Timestamp Open Price; High Price; Time Stamp High Price; Low Price; Timestamp Low Price; Last Price; Timestamp Last Price; Settlement Price; Unit Of Prices; Lot Size; Traded Lots; Number Of Trades; Traded Volume; Unit Of Volumes</i> PR;EU;EAAC;EU Aviation Allowance;5,19;2017-06-14T10:45:00Z;5,25; 2017-06-14T13:45:00Z;5,17;2017-06-14T11:45:00Z;5,17;2017-06-14T16:45:00Z;5,13; EUR/tCO2;5;50;tCO2 | |
| OTC results line for Secondary Emission products | 1-n |

| Line Description | Frequency |
|---|-----------|
| <i>OT; Market Area; Product; Long Name; Number Of Trades; Traded Volume; Lot Size; Traded Lots; Unit Of Volumes</i> OT; EU;EUSP;EU Emission Allowance;0;0;0;0;tCO2 | |
| Total number of lines containing information in the CSV file <i>AL; Number Of Lines</i> AL; 11 | 1 |
| Total number of lines containing information in the CSV file <i>AL; Number Of Lines</i> AL;19 | |

6.2.7 Agricultural Index Results

| Line Description | Frequency |
|---|-----------|
| Comment lines describing the file format # Prices for Skimmed Milk Powder Index # # Data type(ST); Publishing Date; Creation Time # Data type(IL); Reference Week; Index; Price; Unit # Data type(AL);Number of Lines # | 7 |
| Status line with Publishing Date, Creation Time ST; Publishing Date; Creation Time ST;2015-12-16;2015-12-16T13:10:18Z | 1 |
| Results line for Agricultural products IL; Reference Week; Index; Price; Unit IL;Week 51/15;IADS;1673;EUR/t | 1-n |
| Total number of lines containing information in the CSV file AL;Number Of Lines AL;12 | 1 |

6.2.8 ECarbix Results

ECarbix is an emission spot market index

| Line Description | Frequency |
|---|-----------|
| Comment lines describing the file format # ECarbix Prices/Volumes for Emission Spot Market # # Data type(ST);Trading Date;Creation Time # Data type(ID);Index Type;Price;Unit of Prices;Traded Volume;Unit of Volumes # Data type(AL);Number of Lines # | 7 |
| Status line with Publishing Date, Creation Time <i>ST; Trading Date; Creation Time</i> ST;2017-06-14;2017-06-14T19:45:00Z | 1 |
| Results line for Ecarbix products <i>ID; Index Type; Price; Unit of Prices; Traded Volume; Unit of Volumes</i> IL;Day;5,16;EUR/tCO2;4505000;tCO2 | 1-n |
| Total number of lines containing information in the CSV file <i>AL; Number of Lines</i> AL;2 | 1 |

6.2.9 EGIX Results

EGIX is a natural gas future market index

| Line Description | Frequency |
|---|-----------|
| Comment lines describing the file format # Prices/Volumes for EGIX # # Data type (ST);Trading Date;Creation Time # Data type (ID);Index Type;Market Area;Front Contract;Price;Unit of Prices # Data type (AL);Number of Lines # | 7 |
| Status line with Publishing Date, Creation Time <i>ST; Trading Date; Creation Time</i> ST;2018-03-21;2018-03-21T12:34:41Z | 1 |
| Results line for EGIX products <i>ID; Index; Area; Unit; Front; Contract; Price; Traded Volume</i> ID;Day;DE;2017-08;15.374;EUR/MWh;0;MWh | 1-n |

| Line Description | Frequency |
|---|-----------|
| Total number of lines containing information in the CSV file <i>AL; Number of Lines</i> AL;21 | 1 |

6.2.10 KWK Index Results

KWK Index is a power spot market index

| Line Description | Frequency |
|--|-----------|
| Comment lines describing the file format # Prices and Volumes of European Gas Index # # Data type(ST); Creation Time # Data type(IL);Index Type; Period; Price; Unit of Prices # Data type(AL);Number of Lines # | 7 |
| Status line with Publishing Date, Creation Time <i>ST; Creation Time</i> ST;2017-06-14T19:45:00Z | 1 |
| Results line for KWK products <i>IL; Index Type; Period; Price; Unit Of Prices</i> ID;Index Type;Period;Price;Unit of Prices | 1-n |
| Total number of lines containing information in the CSV file <i>AL; Number Of Lines</i> AL;9 | 1 |

6.2.11 APDD Results

Average Price of Delivery Day (APDD) is a natural gas spot market index

| Line Description | Frequency |
|---|-----------|
| Comment lines describing the file format # Prices/Volumes of PEGAS Average Price of Delivery Day GASPOOL # # Data type(ST);Delivery Day;Creation Time # Data type(IL);Market Area;Timestamp;Marginal Buy Price;Marginal Sell Price;Weighted Average Price;Unit of Price;Volume # Data type(AL);Number of Lines # | 7 |

| Line Description | Frequency |
|--|-----------|
| Status line with Publishing Date, Creation Time <i>ST; Delivery Day; Creation Time</i> ST; 2018-07-23;2018-07-23T13:21:08Z | 1 |
| Results line for PEGASI products <i>IL; Market Area; Timestamp; Marginal Buy Price; Marginal Sell Price; Weighted Average Price; Unit Of Price; Volume</i> IL;GPL;2018-07-20T01:55:02Z;22,336;EUR/MWh;250848 | 1-n |
| Total number of lines containing information in the CSV file <i>AL; Number Of Lines</i> AL;284 | 1 |

7. XLSX

7.1 General Remarks

This chapter provides a brief overview over the XLSX files. You will find a detailed specification in [DataSource sFTP files overview and specification.xlsx](#) which is available in the same download location as this file.

The XLSX files are considered history files which contain not only a single trading day, but a history of several trading days combined.

XLSX files for

- Options display a period of 1 calendar month
- Agricultural indices display the complete history of the index
- All other products display a period of one calendar year at a maximum.

The XLSX files are all build in a similar way and follow a common template for Futures and Options:

- First tab: contains an overview on all traded products in the open market
- Second tab: contains an overview on all traded products in the OTC (trade registration) market.
- Each additional tab provides detailed information for each instrument.

Other files have individual templates and details can be viewed under [DataSource sFTP files overview and specification.xlsx](#).

7.1.1 Power Spot History

EEX Group DataSource does not calculate or create Power spot data. The data provided on the datasource.eex-group.com sFTP is directly imported from the EPEX. The specification for those files can be found on the EPEX homepage under <https://www.epexspot.com/en/downloads>. In case of any Questions regarding Power spot data and respective files please contact the EPEX directly under +33 1 73 03 61 21 or marketdata.sales@epexspot.com.