

part of eex group



# Benchmark Statements

European Energy Exchange AG

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## A. Introduction

This document includes all benchmark statements published by EEX AG in accordance with Section 27 of Regulation (EU) 2016/1011. EEX AG provides three families of benchmarks, namely Agricultural Benchmarks, Natural Gas Benchmarks and Power Benchmarks (as defined below) and provides one benchmark statement for each family of benchmarks in this document.

## B. Definitions

Where this benchmark statement uses terms defined in Article 3 of Regulation (EU) 2016/1011 ("Benchmark Regulation"), these terms have the meaning as defined therein.

**„Agricultural Benchmarks“:** means commodity benchmarks with processing potatoes, liquid milk, skimmed milk powder, whey powder or butter being the underlying asset for the purposes of Article 3(1)(1)(b)(ii) of the Benchmark Regulation.

**„Natural Gas Benchmarks“:** means commodity benchmarks with natural gas being the underlying asset for the purposes of Article 3(1) point (1) (b) (ii) of the Benchmark Regulation.

**„Power Benchmarks“:** means commodity benchmarks with electricity being the underlying asset for the purposes of Article 3(1) point (1) (b) (ii) of the Benchmark Regulation.

## C. Power Benchmarks

### 1. Classification of Power Benchmarks

#### 1.1 Commodity benchmarks

The Power Benchmarks provided by EEX AG are "commodity benchmarks" within the meaning of Article 3(1) point (23) Benchmark Regulation.

#### 1.2 Benchmarks from regulated data

The Power Benchmarks provided by EEX AG constitute "regulated-data benchmarks" within the meaning of Article 3(1) point (24) (iv) of the Benchmark Regulation, i.e. they are based on data from an electricity exchange within the meaning of Article 37(1) (j) of Directive 2009/72/EC of the European Parliament and the Council. EEX AG also treats the data provided by the power exchange

SEEPEX for the market area Serbia and the data provided by the Japan Electric Power Exchange (JEPX) for the market areas Kansai and Tokyo as regulated data.

### **1.3 No contributors**

None of the Power Benchmarks provided by EEX AG is based on submissions from "contributors" within the meaning of Article 3(1) point (9) of the Benchmark Regulation.

### **1.4 Title II and Annex II Benchmark Regulation**

As commodity benchmarks based on regulated data, the Power Benchmarks of EEX AG fall within the scope of the Title II Benchmark Regulation.

### **1.5 Non-critical benchmarks**

None of the Power Benchmarks of EEX AG constitutes a "critical benchmark" within the meaning of Article 3(1) point (25) of the Benchmark Regulation. Since they are commodity benchmarks, the distinction between significant and non-significant benchmarks is not applicable to them according to Article 19(1) sub-paragraph 2 of the Benchmark Regulation. The three benchmarks of EEX AG with the largest nominal values are the German Physical Electricity Index (Phelix DE) Month Baseload with a nominal value of approximately EUR 74 billion, the French Electricity Index Month Baseload with a nominal value of approximately EUR 9.5 billion and the Phelix DE Month Peakload with a nominal value of approximately EUR 3 billion.<sup>1</sup>

### **1.6 Disclosures under Article 27(2a) Benchmark Regulation**

Reference is made to Annex I.

## **2. Market description**

The Power Benchmarks provided by EEX AG are intended to reflect the price of electricity on organized electricity markets of various, mostly national market areas. The organized electricity markets are market places operated by spot exchanges (day-ahead spot markets) on which market place members can place orders for the purchase or sale of electricity with physical delivery for the next calendar day in a defined control area. The marketplace operator matches these orders transparently according to rules that describe, among other things, the priorities and algorithms for

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<sup>1</sup> In each case as of 30.12.2019

matching the orders ("order matching"). As a result of order matching, the marketplace generates legally binding contracts ("trades") for the purchase or sale of a certain amount of electricity in the respective control area (delivery area) at the agreed (or "cleared") price.

### 3. Methodology of Power Benchmarks

The Power Benchmarks provided by EEX AG represent the arithmetic mean of all auction prices of the contracts (Base/Peak/Off-Peak) within the respective delivery period (Day/Weekend/Week/Month) traded on the respective Day-Ahead Spot markets. The Power Benchmarks are based on hourly contracts, with the exception of the Power Benchmarks for the Japanese market areas, which are based on half-hourly contracts.

In more detail, the relevant benchmark types with the respective calculation methodology are as follows:

Benchmark type	Calculation methodology
Base Day Benchmark	Arithmetic mean of all auction prices of traded day-ahead contracts for the respective market area for the hours between 00:00 - 24:00 (CE(S)T) and the respective day (Monday to Sunday).
Base Weekend Benchmark	Arithmetic mean of all auction prices of traded day-ahead contracts for the respective market area for the hours between 00:00 - 24:00 (CE(S)T) and the respective weekend (Saturday to Sunday).
Base Week Benchmark	Arithmetic mean of all auction prices of traded day-ahead contracts for the respective market area for the hours between 00:00 - 24:00 (CE(S)T) and the respective week (Monday to Sunday).
Base Month Benchmark	Arithmetic mean of all auction prices of traded day-ahead contracts for the respective market area for the hours between 00:00 - 24:00 (CE(S)T) for all days (Monday to Sunday) of the respective month.
Peak Day Benchmark	Arithmetic mean of all auction prices of traded day-ahead contracts for the respective market area for the hours

	between 08:00 - 20:00 (CE(S)T) and the respective day (Monday to Sunday).
Peak Weekend Benchmark	Arithmetic mean of all auction prices of traded day-ahead contracts for the respective market area for the hours between 08:00 - 20:00 (CE(S)T) and the respective weekend (Saturday to Sunday).
Peak Week Benchmark	Arithmetic mean of all auction prices of traded day-ahead contracts for the respective market area for the hours between 08:00 - 20:00 (CE(S)T) and the respective week (Monday to Friday).
Peak Month Benchmark	Arithmetic mean of all auction prices of traded day-ahead contracts for the respective market area for the hours between 08:00 - 20:00 (CE(S)T) for all days from Monday to Friday in the respective month.
Off-Peak Month Benchmark	Arithmetic mean of all auction prices of traded day-ahead contracts for the respective market area for the hours between 00:00 - 08:00 (CE(S)T) and 20:00 - 24:00 (CE(S)T) for all days from Monday to Friday and for the hours 00:00 - 24:00 (CE(S)T) for the days Saturday and Sunday in the respective month.
Phelix-DE/AT	The Phelix-DE/AT is a weighted average of the day-ahead contracts for Germany and Austria for the relevant hours (base, peak, off-peak, see above), with a weighting of Germany to Austria of 9:1.



Japanese Base Week Benchmark	Arithmetic mean of all auction prices of traded day-ahead contracts for the respective market area for all half hours between 00:00 - 24:00 (JST) and the respective week (Monday to Sunday).
Japanese Base Month Benchmark	Arithmetic mean of all auction prices of traded day-ahead contracts for the respective market area for all half hours between 00:00 - 24:00 (JST) for all days (Monday to Sunday) of the respective month.
Japanese Peak Week Benchmark	Arithmetic mean of all auction prices of traded day-ahead contracts for the respective market area for all half hours between 08:00 - 20:00 (JST) and the respective week (Monday to Friday). The Benchmark Committee will determine the days that are not deemed Peak Delivery Days in consultation with the Management Board of the European Energy Exchange. The determination of these days will be based on Japanese national and bank holidays as publicly announced by the Japanese government, taking into account already introduced maturities.
Japanese Peak Week Benchmark	Arithmetic mean of all auction prices of traded day-ahead contracts for the respective market area for the hours between 08:00 - 20:00 (JST) for all days from Monday to Friday in the respective month. The Benchmark Committee will determine the days that are not deemed Peak Delivery Days in consultation with the Management Board of the European Energy Exchange. The determination of these days will be based on Japanese national and bank holidays as publicly announced by the Japanese government, taking into account already introduced maturities.

The Power Benchmarks of EEX AG are based on the auction prices of the following electricity exchanges:

<b>Market area/Power Benchmarks</b>	<b>Electricity exchange</b>
<b>Austrian Power Benchmarks</b>	EPEX SPOT SE
Phelix-AT Base Day Index	
Phelix-AT Base Weekend Index	
Phelix-AT Base Week Index	
Phelix-AT Peak Day Index	
Phelix-AT Peak Weekend Index	
Phelix-AT Peak Week Index	
Phelix-AT Base Month Index	
Phelix-AT Peak Month Index	
<b>Belgian Power Benchmarks</b>	
Belgian Base Month Index	
<b>British Power Benchmarks</b>	EPEX SPOT SE
GB Power Base Day Index	
GB Power Base Weekend Index	
GB Power Base Week Index	
GB Power Base Month Index	
GB Power Peak Week Index	
GB Power Peak Month Index	
<b>Bulgarian Power Benchmarks</b>	Independent Bulgarian Energy Exchange EAD
Bulgarian Base Week Index	
Bulgarian Base Month Index	

<b>Czech Power Benchmarks</b>	OTE a.s.
Czech Base Day Index	
Czech Peak Day Index	
Czech Base Weekend Index	
Czech Peak Weekend Index	
Czech Base Week Index	
Czech Peak Week Index	
Czech Base Month Index	
Czech Peak Month Index	
<b>Dutch Power Benchmarks</b>	
Dutch Base Day Index	
Dutch Peak Day Index	
Dutch Base Weekend Index	
Dutch Peak Weekend Index	
Dutch Base Week Index	
Dutch Peak Week Index	
Dutch Base Month Index	
Dutch Peak Month Index	

<b>French Power Benchmarks</b>	EPEX SPOT SE
French Base Day Index	
French Base Weekend Index	
French Base Week Index	
French Base Month Index	
French Peak Day Index	
French Peak Weekend Index	
French Peak Week Index	
French Peak Month Index	
<b>German Power Benchmarks</b>	
Phelix-DE Base Day Index	
Phelix-DE Base Weekend Index	
Phelix-DE Base Week Index	
Phelix-DE Peak Day Index	
Phelix-DE Peak Weekend Index	
Phelix-DE Peak Week Index	
Phelix-DE Base Month Index	
Phelix-DE Peak Month Index	
<b>German-Austrian Power Benchmarks</b>	EPEX SPOT SE
Phelix-DE/AT Base Month Index	
Phelix-DE/AT Peak Month Index	
Phelix-DE/AT Off-Peak Month Index	

<b>Greek Power Benchmarks</b>	Hellenic Energy Exchange S.A.
Greek Base Month Index	
<b>Hungarian Power Benchmarks</b>	HUPX Zrt.
Hungarian Base Day Index	
Hungarian Peak Day Index	
Hungarian Base Weekend Index	
Hungarian Peak Weekend Index	
Hungarian Base Week Index	
Hungarian Peak Week Index	
Hungarian Base Month Index	
Hungarian Peak Month Index	
<b>Italian Power Benchmarks</b>	
Italian Base Day Index	
Italian Base Weekend Index	
Italian Base Week Index	
Italian Base Month Index	
Italian Peak Day Index	
Italian Peak Weekend Index	
Italian Peak Week Index	
Italian Peak Month Index	

<b>Japanese Power Benchmarks</b>	Japan Electric Power Exchange (JEPX)
Japanese Power Tokyo Area Base Week Index	
Japanese Power Tokyo Area Base Month Index	
Japanese Power Tokyo Area Peak Week Index	
Japanese Power Tokyo Area Peak Month Index	
Japanese Power Kansai Area Base Week Index	
Japanese Power Kansai Area Base Month Index	
Japanese Power Kansai Area Peak Week Index	
Japanese Power Kansai Area Peak Month Index	
<b>Nordic Power Benchmarks</b>	The benchmarks are based on the Nordic Elspot System Price determined by Nord Pool.
Nordic Base Week Index	
Nordic Base Month Index	
<b>Polish Power Benchmarks</b>	EPEX SPOT SE
Polish Base Month Index	
Polish Peak Month Index	
<b>Romanian Power Benchmarks</b>	OPCOM S.A.
Romanian Base Week Index	
Romanian Peak Week Index	
Romanian Base Month Index	
Romanian Peak Month Index	

<b>Serbian Power Benchmarks</b>	
Serbian Base Week Index	SEEPEX A.D.
Serbian Base Month Index	
<b>Slovakian Power Benchmarks</b>	
Slovakian Base Month Index	OKTE
Slovakian Peak Month Index	
<b>Slovakian Power Benchmarks</b>	
Slovenian Base Month Index	BSP Energy Exchange
Slovenian Peak Month Index	
Slovenian Base Week Index	
Slovenian Peak Week Index	
<b>Spanish Power Benchmarks</b>	
Spanish Base Day Index	OMIE
Spanish Base Weekend Index	
Spanish Base Week Index	
Spanish Base Month Index	
<b>Swiss Power Benchmarks</b>	
Swissix Base Day Index	EPEX SPOT SE
Swissix Base Weekend Index	
Swissix Base Week Index	
Swissix Base Month Index	

#### 4. Unit of Measurement of Power Benchmarks

The unit of measurement of Japanese Power Benchmarks is Yen (JPY) per KWh.

The unit of measurement of British Power Benchmarks is Great Britain Pound (GBP) per MWh.

The unit of measurement of all other Power Benchmarks is Euro (EUR) per MWh.

## **5. Minimum requirements in relation to input data**

The relevant auctions at the respective Day-Ahead Spot markets result in one auction price per hourly or half-hourly contract. Power Benchmarks are calculated as the arithmetic mean of all such auction prices within the respective delivery period (See above section C.3). Accordingly, all auction prices falling within the relevant delivery period are required for the determination of the respective Power Benchmarks (in other words, form the only minimum requirement in terms of quantity of input data). The methodology of the Power Benchmarks does not provide for minimum liquidity requirements for the constituents of Power Benchmarks, that is in relation to the auctions themselves. In terms of minimum standards in relation to the quality of input data, we note that the auction prices qualify as "regulated data" (See Article 3(1) point (24) (iv) of the Benchmark Regulation).

## **6. Exceptional Circumstances and possible limitations of Power Benchmarks**

Due to the methodology of the Power Benchmarks and, in particular, in light of the elements outlined in Section C.5 above, exceptional circumstances that might impact the calculation of the Power Benchmarks are mainly associated with a potential unavailability of input data.

EEX AG would no longer have sufficient input data to calculate the Power Benchmarks in accordance with their methodology if auction prices were not available for any part of the delivery period. In such exceptional circumstances, EEX AG employs – to the extent possible and appropriate – predefined fallback procedures or determines the benchmark by way of exercise of discretion (See Section C.7).

In the event that and as long as one or several required auction prices are not available or are apparently incorrect, the calculation of the Power Benchmark will be based on (i) day-ahead prices determined by the relevant electricity exchange by way of other methods than the Day-Ahead-Auction and where so determined prices are not available (ii) on historic data, more specifically on the Day-Ahead-Auction prices of the day which immediately precedes the impaired day, grouping such days into (i) Monday to Friday and (ii) Saturday and Sunday.

In relation to the Japanese Power Benchmarks, a special fallback procedure is applied in the event of a crisis. If a required Day-Ahead Price is not available at the time of calculation of the benchmark, the arithmetic mean of the last seven Day-Ahead Prices which have been regularly determined by JEPX and which precede the missing Day-Ahead Price are used in its place.



If – in the given circumstances – there is a more appropriate solution than the application of the fallback procedure, EEX AG may determine a Power Benchmark in a discretionary manner as more specifically outlined in section C.7.

The representativeness of the benchmarks may be limited in such exceptional circumstances. The potential impact on the benchmark values depends on the proportion of the delivery period for which input data is not available. Accordingly, the intensity of the impact will usually vary for the different delivery periods of the benchmarks (day/weekend/week/month), with a greater impact for the shorter periods and a decreasing impact for the longer ones.

The representativeness of the benchmarks may also be limited if liquidity should migrate to a spot exchange other than the one whose auction prices are used in accordance with the methodology, or to the OTC market. EEX AG monitors such market developments.

The representativeness of the benchmarks may also be limited by unforeseen market events (e.g. for market areas for which an auction is carried out by more than one nominated electricity market operator in the context of market coupling if market coupling fails).

## **7. Exercise of Discretion and Controls thereof**

There is no element of discretion or judgement involved in the calculation of the Power Benchmarks. An exception applies in the event of a crisis, when a Power Benchmark – for example, in the highly unlikely event of unavailability of auction prices – cannot be calculated according to the relevant formula and (i) no predefined fallback procedure can be applied or (ii) there is a more appropriate solution than the application of the predefined fallback procedure in the given market circumstances. In this event, the following procedure applies:

The Benchmark Committee, which is made up of the members of the Management Board of EEX AG, is responsible for discretionary determination of the methodology to be applied in the event of a crisis. In the event that a decision of the benchmark Committee cannot be obtained, EEX AG's procedures provide for alternatively responsible functions in a precisely defined order of precedence, which include the Director Market Operations, the Director European Power Derivatives, their alternates and the member with the highest seniority within the respective department. The decisive criterion of any such discretionary decision shall be the respective methodology described above or its objectives, which each alternative solution should meet as closely as possible. If a discretionary decision is taken by one of the alternatively responsible functions, the measures taken must be brought to the attention of the Benchmark Committee, which either approves them or initiates the benchmark correction procedure.

## 8. Correction of Power Benchmarks

The correction of a Power Benchmark is made

- (a) if subsequent to the determination of a Power Benchmark in accordance with a fallback procedure, the reasons for which determination of the benchmark in accordance with its regular methodology was not possible at the time cease to exist (e.g. missing input data becomes available at a later stage); in this case the benchmark shall be recalculated and corrected using its regular methodology;
- (b) if, in the wake of a crisis, the Benchmark Committee does not approve the discretionary determination of the benchmark made by one of the alternatively responsible functions; in this case, the benchmark shall be recalculated according to the principles that the Benchmark Committee determines at its discretion; and/or
- (c) if a data or calculation error is detected.

EEX AG will inform its trading participants as well as third parties who have concluded a license agreement with EEX AG on the use of the respective benchmark about each correction. Trading participants are notified on the website of EEX AG ([www.eex.com](http://www.eex.com)) by means of an EEX customer notification.

## 9. Review and approval of the methodology

With regard to the procedures for the review of the methodology, reference is made to the "Benchmark Change and Cessation Procedure" of EEX AG. Each determination or change of the methodology is carried out by the Benchmark Committee of EEX AG.

## 10. Notes

We note that factors - in particular external factors beyond the control of EEX AG - may necessitate changes to, or the cessation of, benchmarks.

We further note that changes to, or the cessation of, a benchmark may have an impact upon financial contracts and financial instruments that reference that benchmark.

## **D. Natural Gas Benchmarks**

### **1. Classification of Natural Gas Benchmarks**

#### **1.1 Commodity benchmarks**

The Natural Gas Benchmarks provided by EEX AG are "commodity benchmarks" within the meaning of Article 3(1) point (23) Benchmark Regulation.

#### **1.2 Benchmarks from regulated data**

The Natural Gas Benchmarks provided by EEX AG constitute "regulated-data benchmarks" within the meaning of Article 3(1) point (24) (v) of the Benchmark Regulation, i.e. they are based on data from a natural gas exchange within the meaning of Article 41(1) of Directive 2009/73/EC of the European Parliament and the Council.

#### **1.3 No contributors**

None of the Natural Gas Benchmarks provided by EEX AG is based on submissions from "contributors" within the meaning of Article 3(1) point (9) of the Benchmark Regulation.

#### **1.4 Title II and Annex II Benchmark Regulation**

As commodity benchmarks based on regulated data, the Natural Gas Benchmarks provided by EEX AG fall within the scope of the Title II Benchmark Regulation.

#### **1.5 Non-critical benchmarks**

None of the Natural Gas Benchmarks of EEX AG constitutes a "critical benchmark" within the meaning of Article 3(1) point (25) of the Benchmark Regulation. Since they are commodity benchmarks, the distinction between significant and non-significant benchmarks is not applicable to them according to Article 19(1) sub-paragraph 2 of the Benchmark Regulation.

#### **1.6 Disclosures under Article 27(2a) Benchmark Regulation**

Reference is made to Annex I.

## 2. Market description

The Natural Gas Benchmarks provided by EEX AG are intended to reflect the price of natural gas on organized natural gas markets of various, mostly national, market areas also referred to as hubs.

EEX AG provides Natural Gas Benchmarks for the following market areas:

- Dutch Title Transfer Facility (TTF)
- Austrian Central European Gas Hub (CEGH VTP)
- Trading Hub Europe (THE)<sup>2</sup>

The organized natural gas markets are marketplaces operated by natural gas exchanges on which marketplace members can place orders for the purchase or sale of natural gas with physical delivery for the next gas delivery days or upcoming weekend in a defined market area.

These orders will be matched in accordance with transparent rules of the marketplace that describe, among other things, the priorities and algorithms for matching the orders ("order matching"). As a result of order matching, legally binding contracts ("trades") for the purchase or sale of a certain amount of natural gas in the respective market area at the agreed (or "cleared") price are concluded at the marketplace.

## 3. List of Natural Gas Benchmarks

EEX AG provides the following Natural Gas Benchmarks:

### **EEX TTF EGSi Benchmarks**

- EEX TTF Day European Gas Spot Index (EEX TTF Day EGSi)
- EEX TTF Weekend European Gas Spot Index (EEX TTF Weekend EGSi)
- EEX TTF Week European Gas Spot Index (EEX TTF Week EGSi)
- EEX TTF Month European Gas Spot Index (EEX TTF Month EGSi)

### **EEX CEGH VTP EGSi Benchmarks**

- EEX CEGH VTP Day European Gas Spot Index (EEX CEGH VTP Day EGSi)
- EEX CEGH VTP Weekend European Gas Spot Index (EEX CEGH VTP Weekend EGSi)
- EEX CEGH VTP Week European Gas Spot Index (EEX CEGH VTP Week EGSi)
- EEX CEGH VTP Month European Gas Spot Index (EEX CEGH VTP Month EGSi)

## **EEX THE EGSI Benchmarks<sup>2</sup>**

- EEX THE Day European Gas Spot Index (EEX THE Day EGSI)
- EEX THE Weekend European Gas Spot Index (EEX THE Weekend EGSI)
- EEX THE Week European Gas Spot Index (EEX THE Week EGSI)
- EEX THE Month European Gas Spot Index (EEX THE Month EGSI)

## **4. Methodology of Natural Gas Benchmarks**

### **4.1 EEX Day EGSI**

The EEX Day EGSI for a specific market area is the volume-weighted average price of all trades in the respective EEX Day Spot Contract for a gas delivery day that are executed on the EEX Natural Gas Spot Market between 8.00 and 18.00 CE(S)T on the Exchange Day<sup>3</sup> before the start of the respective delivery period of the contract (“Calculation Period”). The values of an EEX Day EGSI for gas delivery days that are also included in an EEX Weekend Spot Contract, correspond to the volume weighted average price of all trades of this Weekend Spot Contract.

For further information in relation to the relevant contracts, reference is made to the Contract Specifications of EEX available on the Website of EEX ([www.eex.com](http://www.eex.com)).

### **4.2 EEX Weekend EGSI**

The EEX Weekend EGSI for a specific market area is determined as the arithmetic mean of the values of the EEX Day EGSI of the gas delivery days Saturday and Sunday that are comprised by the respective calendar weekend

### **4.3 EEX Week EGSI**

The EEX Week EGSI for a specific market area is determined as the arithmetic mean of the values of the EEX Day EGSI of the gas delivery days included in the respective calendar week for that market area.

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<sup>2</sup> German natural gas hubs NetConnect Germany (NCG) and Gaspool (GPL) haven been merged into a single hub called Trading Hub Europe (THE) on 1 October 2021. NCG EGSI Benchmarks have been renamed into “THE EGSI Benchmarks” and reflect the new THE market area, based on the respective contracts traded on the EEX Natural Gas Spot Market.

<sup>3</sup> The EEX Natural Gas Spot Market follows the official UK Bank Holiday calendar (<https://www.gov.uk/bank-holidays>)

#### **4.4 EEX Month EGSi**

The EEX Month EGSi for a specific market area is determined as the arithmetic mean of the values of the corresponding EEX Day EGSi of the gas delivery days included in the respective calendar month for that market area.

### **5. Unit of Measurement of Natural Gas Benchmarks**

The unit of measurement of all Natural Gas Benchmarks is Euro (EUR) per MWh.

### **6. Minimum requirements in relation to input data**

No minimum liquidity requirements or minimum requirements as to the quantity of input data apply. In terms of minimum standards in relation to the quality of input data, we note that the auction prices used qualify as "regulated data" (See Article 3(1) point (24) (iv) of the Benchmark Regulation).

### **7. Exceptional Circumstances and possible limitations of Natural Gas Benchmarks**

Due to the methodology of the Natural Gas Benchmarks and, in particular, in light of the elements outlined in Section D.6 above, exceptional circumstances that might impact the calculation of the Natural Gas Benchmarks are mainly associated with a potential unavailability of input data or a system interruption.

EEX AG would no longer have sufficient input data to calculate the Natural Gas Benchmarks in accordance with their methodology if there are no trades during the Calculation Period. EEX AG employs – to the extent possible and appropriate – predefined fallback procedures in such event or determines the benchmark by way of exercise of discretion (See Section D.8). These fallback procedures are applied as long as the exceptional circumstances persist.

In the event of an unavailability of input data, the value of the EEX Day EGSi will be equal to the value of the EEX Day EGSi of the most recent Exchange Day. The same value will be used in the calculation of the Weekend, Week and Month EGSi benchmarks.

In the event of system interruptions, EEX AG will determine a preliminary value of the affected Natural Gas Benchmark. The preliminary value of the relevant EEX Day EGSi and EEX Weekend EGSi shall be determined in accordance with fallback procedure applicable in the event of unavailability of input data. The preliminary value of the EEX Week EGSi and EEX Month EGSi shall be equal to the daily settlement price of the respective EEX Week EGSi Natural Gas Future or EEX

Month EGSI Natural Gas Future of the previous Exchange Day. As soon as the system interruption is resolved, EEX AG initiates the Benchmark Correction Procedure.

If – in the given circumstances – there is a more appropriate solution than the application of the fallback procedure, EEX AG may determine a Natural Gas Benchmark in a discretionary manner as more specifically outlined in section D.8.

The representativeness of the benchmarks may be limited in such exceptional circumstances. The potential impact on the benchmark values depends on the period of unavailability of input data or the duration of a system interruption. Accordingly, the intensity of the impact will usually vary for the different delivery periods of the benchmarks (day/weekend/week/month), with a greater impact for the shorter periods and a decreasing impact for the longer ones.

The representativeness of the benchmarks may also be limited should liquidity migrate to a spot market other than the EEX Natural Gas Spot Market, or to the OTC market. EEX AG monitors such market developments.

## **8. Exercise of Discretion and Controls thereof**

There is no element of discretion or judgement involved in the calculation of the Natural Gas Benchmarks. An exception applies in the event of a crisis, when the Natural Gas Benchmarks - for example, in the highly unlikely event of unavailability of auction prices - cannot be calculated according to the relevant formula and (i) no predefined fallback procedure can be applied or (ii) there is a more appropriate solution than the application of the predefined fallback procedure in the given market circumstances. In this event, the following procedure applies:

The Benchmark Committee, which is made up of the members of the Management Board of EEX AG, is responsible for discretionary determination of the methodology to be applied in the event of a crisis. In the event that a decision of the Benchmark Committee cannot be obtained, EEX AG's procedures provide for alternatively responsible functions in a precisely defined order of precedence, which include the Head of Gas and Registries Operations, the Director of Gas and Registries and the staff member with the highest seniority within the Gas and Registries Operations department. The decisive criterion of any such discretionary decision shall be the respective methodology described above and its objectives, which each alternative solution should meet as closely as possible. If a discretionary decision is taken by one of the alternatively responsible functions, the measures taken must be brought to the attention of the Benchmark Committee, which either approves them or initiates the benchmark correction procedure.

## 9. Correction of Power Benchmarks

The correction of a Natural Gas Benchmark is made

- (a) if subsequent to the determination of a Natural Gas Benchmark in accordance with a fallback procedure, the reasons for which determination of the benchmark in accordance with its regular methodology was not possible at the time cease to exist (e.g. missing input data becomes available at a later stage or system interruption has been resolved); in this case the benchmark shall be recalculated and corrected using its methodology;
- (b) if, in the wake of a crisis, the Benchmark Committee does not approve the discretionary determination of the benchmark made by one of the alternatively responsible functions; in this case, the benchmark shall be recalculated according to the principles that the Benchmark Committee determines at its discretion; and/or
- (c) if a data or calculation error is detected.

EEX AG will inform its trading participants as well as third parties who have concluded a license agreement with EEX AG on the use of the respective benchmark about each correction. Trading participants are notified on the website of EEX AG ([www.eex.com](http://www.eex.com)) by means of an EEX customer notification.

## 10. Review and approval of the methodology

With regard to the procedures for the review of the methodology, reference is made to the "Benchmark Change and Cessation Procedure" of EEX AG. Each determination or change of the methodology is carried out by the Benchmark Committee of EEX AG.

## 11. Notes

We note that factors - in particular external factors beyond the control of EEX AG - may necessitate changes to, or the cessation of, benchmarks.

We further note that changes to, or the cessation of, a benchmark may have an impact upon financial contracts and financial instruments that reference that benchmark.



## E. Agricultural Benchmarks

### 1. Classification of Agricultural benchmarks

#### 1.1 Commodity benchmarks

The Agricultural Benchmarks provided by EEX AG are "commodity benchmarks" as defined by Article 3(1) point (23) of the Benchmark Regulation.

#### 1.2 No regulated-data benchmarks

The Agricultural Benchmarks provided by EEX AG do not constitute "regulated-data benchmarks" within the meaning of Article 3(1) point (24) (iv) of the Benchmark Regulation.

#### 1.3 No Contributors

None of the Agricultural Benchmarks provided by EEX AG is based on submissions from "contributors" within the meaning of Article 3(1) point (9) of the Benchmark Regulation.

#### 1.4 Title II and Annex II Benchmark Regulation

The Agricultural Benchmarks of EEX AG are subject to Annex II of the Benchmark Regulation as they are neither based on regulated data nor on input from contributors.

#### 1.5 Non-critical benchmarks

None of the Agricultural Benchmarks of EEX AG constitutes a "critical benchmark" within the meaning of Article 3(1) point (25) of the Benchmark Regulation. Since they are commodity benchmarks, the distinction between significant and non-significant benchmarks is not applicable to them according to Article 19(1) subparagraph 2 of the Benchmark Regulation.

#### 1.6 Disclosures under Article 27(2a) Benchmark Regulation

Reference is made to Annex I.

### 2. Market description and methodology

**Potatoes:** Processing potatoes are potatoes used for the production of food products such as French fries. The most important countries of origin for processing potatoes in Europe are Belgium, the

Netherlands, France and Germany. In terms of raw material input, Belgium is the largest potato processor in Europe and is not able to cover its own needs completely. Therefore, Belgium is dependent on supplies of processing potatoes from neighbouring countries, especially France. Processing potatoes account for more than 30% of the total EU potato harvest.

The EEX European Processing Potato Index is usually published exclusively in the period from mid-November to the beginning of June of the following year. This is due to the corresponding marketing season.

Market participants include companies in the agri-food sector such as farms, producer groups, potato trading companies and companies in the food industry (producers of French fries).

**Milk/Dairy Products:** With around 167 million tons, the EU is the second largest milk producer in the world after India. In the global trade in dairy products, the EU leads on the supply side, just ahead of New Zealand. In the markets for skimmed milk powder and cheese, as well as for whey powder and condensed milk, the EU is the largest exporter, and second in butter, whole milk powder and lactose. The largest producers of milk and dairy products in the EU are Germany, France, followed by the Netherlands, Italy and Poland. Until its withdrawal on 31.01.2020, the United Kingdom was the third largest producer.

Market participants for milk/dairy products include Dairies, dairy product traders and companies in the food industry.

## 2.1 EEX European Processing Potato Index

The **EEX European Processing Potato Index** is intended to reflect the market price of processing potatoes for the production of French fries in the European Economic Area.

Renowned price assessments for Belgium, Germany, France and the Netherlands, which together form one market area, are used as the data basis. The index represents the unweighted average of the price assessments from the four countries for one decitonne (100 kg) of potatoes with the following parameters:

- Processing potatoes for the production of French fries
- Tuber size: 40mm +
- Basket of varieties: Agria, Fontane and varieties comparable in price and processing

At the beginning of each season, a correction value is determined for the period of the season in order to make the quotations comparable, in particular with regard to the parameters described above. This correction value is deducted from, or added to, the country quotation concerned.

In addition, a weighting within the variety basket may be carried out. This includes the possibility of not taking into account one or more varieties. The final determination of the correction value is made by the Chief Strategy Officer of EEX AG.

The determination of the correction value involves elements of judgement and discretion, taking into account amongst others the following criteria and input factors:

- price differences between the different potato calibrations (tuber sizes) available;
- share of the differently calibrated potatoes within total supply expected;
- collection and evaluation of input from relevant market participants and/or market analysts of European processing potatoes in respect to the expected trade margin ("Handelsspanne") in the physical market also in comparison to the respective potato price levels.

## 2.2 EEX European Liquid Milk Index

The **EEX European Liquid Milk Index** is intended to reflect the market price for liquid milk in the European Economic Area.

The publications of the "Milk Market Observatory" of the European Commission for Denmark, Germany, Ireland and the Netherlands serve as data basis. These are the milk producer prices which are transmitted monthly by the Member States on the basis of EU Regulation 2017/1185 Article 12 (a) - Annex II.4 (a).

The European Liquid Milk Index is calculated as the unweighted average of the price determinations of the four countries.

## 2.3 EEX European Skimmed Milk Powder Indices

The EEX European Skimmed Milk Powder Indices are intended to reflect the market price for skimmed milk powder in the European Economic Area. The following indices are provided:

- EEX Weekly European Skimmed Milk Powder Index
- EEX Monthly European Skimmed Milk Powder Index

Renowned price assessments for Germany, France and the Netherlands are used as the data basis.

The **EEX Weekly European Skimmed Milk Powder Index** is calculated as the unweighted average of the price observations of the three countries for one metric ton (1,000 kg) of food grade skimmed milk powder.

The **EEX Monthly European Skimmed Milk Powder Index** represents the arithmetic mean of all published values of the EEX Weekly European Skimmed Milk Powder Index of the respective month.

## 2.4 EEX European Butter Indices

The EEX European Butter Indices are intended to reflect the market price of butter in the European Economic Area. The following indices are provided:

- EEX Weekly European Butter Index
- EEX Monthly European Butter Index

Renowned price assessments for Germany, France and the Netherlands are used as the data basis.

The **EEX Weekly European Butter Index** is calculated as the unweighted average of the price determinations of the three countries for one metric ton (1,000 kg) of butter.

The **EEX Monthly European Butter Index** represents the arithmetic mean of all published values of the EEX Weekly European Butter Index of the respective month.

## 2.5 EEX European Whey Powder Indices

The EEX European Whey Powder Indices are intended to reflect the market price for whey powder in the European Economic Area. The following indices are provided:

- EEX Weekly European Whey Powder Index
- EEX Monthly European Whey Powder Index

Renowned price assessments for Germany, France and the Netherlands are used as the data basis.

The **EEX Weekly European Whey Powder Index** is calculated as the unweighted average of the price determinations of the three countries for one metric ton (1,000 kg) of whey powder.

The **EEX Monthly European Whey Powder Index** represents the arithmetic mean of all published values of the EEX Weekly European Whey Powder Index of the respective month.

## 3. Possible limitations of Agricultural Benchmarks

EEX AG does not have sufficient input data for the determination of the Agricultural Benchmarks in accordance with the methodology if no price data is available in whole or in part or if, due to special

circumstances, no price data adequately reflecting market conditions is available for individual or several market areas. In this case the ability of the benchmark to reflect the referenced market may be impaired. In such cases EEX AG calculates the benchmark concerned to the extent possible according to the corresponding methodology and additionally uses market-referencing methods, which may include extrapolation procedures or expert judgement.

#### 4. Correction of Benchmarks

The correction of an Agricultural Benchmark is made if a data or calculation error is detected.

EEX AG will inform its trading participants as well as third parties who have concluded a license agreement with EEX AG on the use of the respective Agricultural Benchmark about each correction. Trading participants are notified on the website of EEX AG ([www.eex.com](http://www.eex.com)) by means of an EEX customer notification.

#### 5. Review and approval of the methodology

With regard to the procedures for the review of the methodology, reference is made to the "Benchmark Change and Cessation Procedure" of EEX AG. Each determination or change of the methodology is carried out by the Benchmark Committee of EEX AG.

#### 6. Notes

We note that factors - in particular external factors beyond the control of EEX AG - may necessitate changes to, or the cessation of, Agricultural Benchmarks.

We further note that changes to, or the cessation of, an Agricultural Benchmark may have an impact upon financial contracts and financial instruments that reference that Agricultural Benchmark.

### Annex I

<b>EXPLANATION OF HOW ESG FACTORS ARE REFLECTED IN THE KEY ELEMENTS OF THE BENCHMARK STATEMENT</b>	
<b>SECTION 1 – CONSIDERATION OF ESG FACTORS</b>	
<b>Item 1.</b> Name of the benchmark administrator.	European Energy Exchange AG

<p><b>Item 2.</b> Type of benchmark or family of benchmarks. <i>Choose the relevant underlying asset from the list provided in Annex II.</i></p>	Commodity Benchmarks
<p><b>Item 3.</b> Name of the benchmark or family of benchmarks.</p>	Power Benchmarks Natural Gas Benchmarks Agricultural Benchmarks
<p><b>Item 4.</b> Are there in the portfolio of the benchmark administrator any EU Climate Transition Benchmarks, EU Paris-aligned Benchmarks, benchmarks that pursue ESG objectives or benchmarks that take into account ESG factors?</p>	No
<p><b>Item 5.</b> Does the benchmark or family of benchmarks pursue ESG objectives?</p>	No
<p><b>Item 6.</b> Where the response to Item 5 is positive, provide below the details (score) in relation to the ESG factors listed in Annex II for each family of benchmarks at aggregated level. The ESG factors shall be disclosed at an aggregated weighted average value at the level of the family of benchmarks.</p>	
<p>a) List of combined ESG factors:</p>	Details on each factor: not applicable
<p>b) List of environmental factors:</p>	Details on each factor: not applicable
<p>c) List of social factors considered:</p>	Details on each factor: not applicable
<p>d) List of governance factors considered:</p>	Details on each factor: not applicable
<p><b>Item 7.</b> Where the response to Item 5 is positive, provide below the details (score) for each benchmark, in relation to the ESG factors listed in Annex II, depending on the relevant underlying asset concerned.</p>	
<p>a) List of combined ESG factors:</p>	Details on each factor: not applicable
<p>b) List of environmental factors:</p>	Details on each factor: not applicable
<p>c) List of social factors considered:</p>	Details on each factor: not applicable
<p>d) List of governance factors considered:</p>	Details on each factor: not applicable
<p>Hyperlink to the information on ESG factors for each benchmark:</p>	Not applicable
<p><b>Item 8.</b> Data and standards used</p>	
<p>a) Description of data sources used to provide information on the ESG factors in the benchmark statement.</p>	Not applicable

b) Reference standards.	Not applicable
<b>SECTION 2 – ADDITIONAL DISCLOSURE REQUIREMENTS FOR EU CLIMATE TRANSITION AND EU PARIS-ALIGNED BENCHMARKS</b>	
<b>Item 9.</b> Where a benchmark is labelled as ‘EU Climate Transition Benchmark’ or ‘EU Paris-aligned Benchmark’, benchmark administrators shall also disclose the following information:	
a) Does the benchmark align with the target of reducing carbon emissions or the attainment of the objectives of the Paris Agreement;	Not applicable
b) the temperature scenario, in accordance with international standards, used for the alignment with the target of reducing GHG emissions or attaining of the objectives of the Paris Agreement;	Not applicable
c) the name of the provider of the temperature scenario used for the alignment with the target of reducing GHG emissions or the attainments of the objectives of the Paris Agreement,	Not applicable
<b>Date on which information has been last updated and reason for the update:</b>	18 December 2020