

Launch of EGSI Futures

EEX Trader Workshop, MS Teams, 10th of June 2021

part of eex group

Welcome to EEX trader workshop

Rules of todays EEX trader workshop EGSI Futures and THE

- 1. Please switch off your camera and mute your microphone.
- 2. The workshop and discussion will be held in in English.
- 3. For German speaking participants a simultaneous translation is available:
 - From Austria: 0043-1253021440, Conf.-Code: 5864743190#
 - From Belgium: 0032-28948090; Conf.-Code: 5864743190#
 - From Germany: 0049-06924437392; Conf.-Code: 5864743190#
 - From the Netherlands: 0031-207946388; Conf.-Code: 5864743190#
- 4. Please use the chat function or notify us by raising the virtual hand, if you want to discuss or have questions
- 5. Please be aware, that due to simultaneous translation, more time might be needed

Agenda					
9.30 - 10 am	Presentation EGSI Futures				
10 10.15 am	Questions to EGSI Futures				
10.15 - 10.45 am	Presentation THE				
10.45 - 11 am	Questions to THE				

Start at 9.30 CE(S)T

EGSI – What is it about?

EGSI – European Gas Spot Index

- Today Europe's trustiest, robust and most transparent natural gas index
- Introduced in April 2017 now coverage of 8 gas markets (incl. CEGH, THE & TTF)
- Calculation with supervised trades at EEX EU's most liquid spot trading venue
- Offering of EGSI values free of charge on homepage and market data products
- EGSI replaced mainly chargeable OTC price sources for industry and end user



12.02.2021	Sources for EGSI calculation					
Market	MS	Member	Trader	Trades	Qty	Volume
		#	#	#	GW	TWh
CEGH	> 80%	68	129	658	31	1.1
THE (GPL+NCG)	> 70 %	117	295	3,228	182	6.2
TTF	> 60 %	92	273	2,919	186	6.6

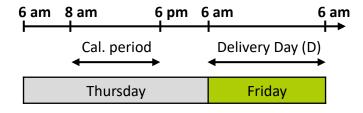
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EGSI – flagship of EEX gas indices

Description and general calculation

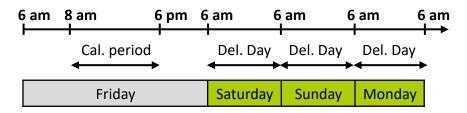
- Volume weighted average of all trades per delivery day (Monday-Sunday)
 - which are executed in Day-Ahead and Weekend products between 8 am and 6 pm on the last exchange trading day before delivery
- Publication every business day latest at 6.45 pm CET on <u>EEX-Homepage</u>
- Uniform and supervised calculation across all markets

Next calendar day is a business day



$$EGSI_{Friday} = \frac{\sum_{i=1}^{n} Price_{Fri,i} \times Volume_{Fri,i}}{\sum_{i=1}^{n} Volume_{Fri,i}}$$

Next calendar day is a weekend day



Saturday, Sunday and Monday will be calculated on Friday

EGSI Futures – product portfolio

Days	WDNW	BOW	WE	Weeks	Split	ВОМ	Months	Quarter	Seasons	Cal. Year
1			WE + 1	Del. Wk			Del. M	Q +1	S +1	Cal +1
2			WE + 2	Wk + 1			M +1	Q + 2	S + 2	Cal + 2
3				Wk +2			M + 2	Q + 3	S + 3	Cal + 3
4				Wk + 3			M + 3	Q + 4	S + 4	Cal + 4
5				Wk + 4			M + 4	Q + 5	S + 5	Cal + 5
6							M + 5	Q + 6	S + 6	Cal + 6
7							M + 6	Q + 7		
8							M + 7*	Q + 8*		
9							M + 8*	Q + 9*		
10							M + 9*	Q + 10*		
11							M + 10*	Q + 11*		
12							M + 11*			
13							M + 12*			
1/										

As of Go-Live

In a 2nd step possible

Order books linked to EGSI Futures

Spark Spreads Germany / NCG (THE) Germany / TTF Austria / TTF Austria / CEGH VTP Netherland / TTF Italy / TTF

Location Spreads			
NCG (THE) / TTF			
CEGH VTP / TTF			
CEHG VTP / NCG			

Time Spreads
Month / Month
Quarter / Quarter
Season / Season
Year / Year

Week*
Month
Quarter
Year

Month
Quarter
Season
Year

* Only for Germany / NCG (THE)
Internal

Customers benefits by EGSI Futures

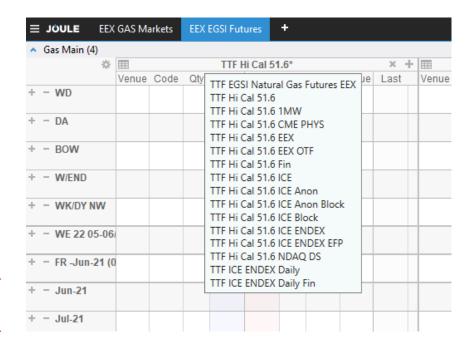
- Easier / state of the art access for financial trading of gas (churn rate > 10)
 - No need for conclusion of balancing/shipper agreement with TSO/MAM
 - Support higher activity of existing member and faster market entry for new player
- Simplified fulfilment
 - Cash-settlement against EGSI
 - No need/risk for physical delivery, no need to close-out before delivery month
 - Minimizing close-out risks in delivery month by trading of Days, WE and Weeks
- Linkage to high liquid EEX power market global N°1 exchange in power trading
 - Alignment with the standard of the highly liquid power markets
 - Spark Spreads build bridge between gas and power market; price & execution guarantee
 - Benefitting from significantly cross-margining effects
- Simplified hedging of volatilities coming from:
 - The renewables markets: equal cash-settled short-term products for power and gas
 - The gas spot market: hedging of gas futures even in the delivery period

Access to EGSI Futures in Trayport Joule

1/2

Long-term EGSI Futures are already in commingled* order books

- Long-term EGSI Futures are: Months, Quarter, Seasons and Calendar
- They are already visible in the commingled order books (e.g. TTF Hi Cal 51.6*)
 - Together with physical gas futures of broker and exchanges (e.g. EEX)



Long-term futures (here Months)

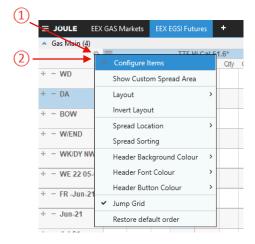
^{*} The commingled order book/stack is marked by an asterisk - you can see which products are included when you hoover the curser over the title bar of the stack, see figure above Internal

Access to EGSI Futures in Trayport Joule

2/2

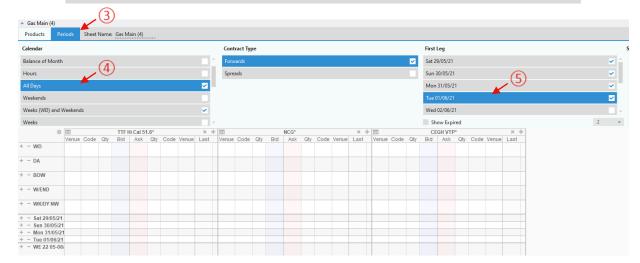
Short-term EGSI Futures have to be added - manually

- Short-term EGSI Futures are: Days, Weekends, Weeks
- They are usually not visible in a commingled order book for gas only* trader
 - These extra delivery periods have to be added as extra lines to the order book



Steps to add Days, Weekends and Weeks

- Click on the gear icon to open settings for your workspace/order book
- Click Configure Items
- Go to the tab Periods
- Click on All Days or Weekend or Weeks
- Choose the Days, Weekends or Weeks you would like to display

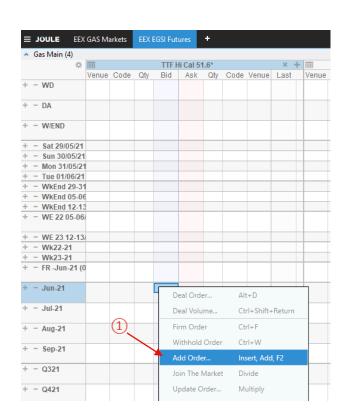


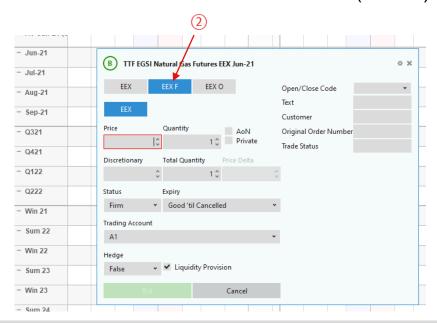
Short-term futures (here Days)

Trading of EGSI Futures in Trayport Joule

Order entry for EGSI Futures in the same way* as for any order

- Important:
 - Need of indication, whether order is for EEX physical or financial long-term futures
 - No need for indication of short-term futures EEX financial as default (EEX F)





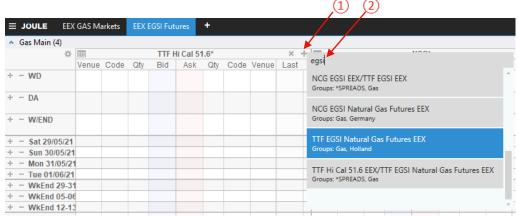
Steps to input an order and choice the trading venue code

- ① Click on "Add Order" for the wanted product in the order book
- 2 Choose "EEX F" in the order input dialog box for EGSI Futures
- 3 Continue as usual

^{*} In the commingled stacks for each hub/gas market

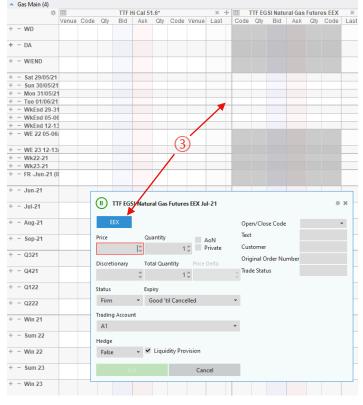
EGSI Futures in an own order book in Joule

EGSI Futures are also visible/tradable in a single order book



Steps to see and trade EGSI Futures in an own order book

- 1 Click on the small plus at the top right corner of your orderbook
- 2 Enter "EGSI" → the EEX EGSI Futures and Spreads will be listed
- 3 Enter orders directly from the EGSI order book
 - No choice of the trading venue possible → EEX is default



EEX GAS Markets

^{*} In the commingled stacks for each hub/gas market

Testing of EGSI Futures before Go-Live

- Trader are invited to test visibility/tradability of EGSI Futures
 - EGSI Futures are already visible at ISV's (Trayport, TT, ...) but also T7
 - Once the official confirmation letter for admission in EGSI Futures is sent, either EEX MO or KAM will request member for order entry tests
- Both, short- and long-term EGSI Futures needs to be tested
 - Short-dated EGSI Futures: Day, Weekend and Weeks
 - Long-term EGSI Futures: Months, Quarter, Seasons and Calendar
- Available testing period between 14th and 25th of June
 - Test order can be done via ISV's (Trayport, TT, ...) in the EEX trading system, because order matching and reporting functionalities are still deactivated
 - EEX MO/Sales will respond to member, whether order requests were seen
- If you need support for testing, please contact EEX Market Operation teams
 - T +33 173 03-9624 (Paris) | +49 341 2156-222 (Leipzig)
 - gas@powernext.com | trading@eex.com

EGSI

Settlement of EGSI Futures in delivery

- Same methodology as today for financial power futures at EEX
 - Settlement window: 17:00 17:15 CET
 - Daily settlement price: arithmetic average of
 - Already available EGSI values for delivery days in the delivery period and
 - The last settlement price of the respective future before start of delivery (BDSP)

 BDSP



Final settlement price (FSP) can be calculated if all EGSI values are known



Final Settlement price (May 30th) = 5.098 €/MWh

Membership & transaction fees / Incentive schemes

Membership fees

- No extra fee for existing member in gas futures at CEGH, NCG/GPL and TTF
- No extra fee for existing member in power futures, emerging and environmental markets until end of 2022

Transaction fees (trading + clearing)

- In line with existing transaction fees for physical gas products
- No transaction fees for the:
 - Gas leg of a Spark Spread (e.g. Germany / TTF → TTF is for free)
 - Second leg of a Location Spread (e.g. NCG / TTF → TTF is for free)
- No transaction fees for the initiator of a transaction until 31st of July 2022

Incentive schemes

- EEX is happy to support Market Maker / Liquidity provider financially in
 - CEGH, NCG and TTF EGSI Futures
 - Spread instruments (e.g. spark spreads, location spreads)
- Interested in? Please contact EEX Gas Sales team: <u>sales@eex.com</u>

Admission for EGSI Futures

- Trading participants / Non-Clearing Member
 - a. Member for physical CEGH, NCG and TTF futures, are automatically admitted also for financial (EGSI) gas futures, unless they actively opt-out
 - b. Member for Derivative trading at EEX, but not registered for above mentioned gas futures, write an E-Mail to membership@powernext.com incl. following information:
 - Market area: Where to trade EGSI Futures?
 - Trader: Which trader should be activated/assigned to EGSI Futures?
 - c. Member, not yet registered for futures trading at EEX, write an E-Mail to membership@powernext.com incl. following information:
 - Market extension form (A01): What to trade?
 - Market area: Where to trade EGSI Futures?
 - Trader: Who should be activated/assigned to EGSI Futures?
 - Anyhow, each admission of EGSI Futures will be confirmed via notification letter
- Clearing Member
 - Existing clearing licence of Clearing Members already covers EGSI Futures

Your last steps to EGSI Futures trading on 28 June 2021

- 1. Ensure visibility of EGSI Futures in your trading screen (e.g. Joule, TT, T7, ...)
 - Month, Quarter and Years are automatically visible in commingled order books
 - Days, Weekend and Weeks have to be added manually by trader
- 2. Ensure tradability of EGSI Futures by order entry tests ahead of Go-Live
 - EEX Sales and EEX MO will contact you to attend on the offered testing periods
 - Call EEX Market Operation in case of any questions before and after Go-Live:
 - Paris: +33 173 03-9624, gas@powernext.com
 - Leipzig: +49 341 2156-222, trading@eex.com
- 3. Trade EGSI Futures and associated spreads first time on 28 June 2021
 - Optional: Let your KAM know, that you intend to trade (goodies,...)
 - Optional: Let your KAM know, that you would act as Market Maker/Liq. Provider

We are ready for the launch

28/06/2021



Questions?

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EEX Customer Care and Member Readiness Teams

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EGSI Futures in a commingled Joule order book

	TTF Hi Cal 51.6*					
	Code	Qty	Bid	Ask	Qty	Code
WD	EEXS	100	6,375	6,400	10	EEXS
DA	EEXS	10	6,350	6,375	85	EEXS
WE	EEXS	7	6,375	6,425	20	TFS
Saturday	EEXS	100	6,325	6,400	100	EEXS
Sunday	ICAP	30	6,300	6,525	100	EEXS
Sat 15/05/21	EEXF	5	6,420	6,435	30	EEXF
Sun 16/05/21	EEXF	8	6,385	6,395	14	EEXF
Mon 17/05/21	EEXF	13	6,345	6,355	37	EEXF
Tue 18/05/21	EEXF	30	6,715	6,730	30	EEXF
WkEnd 15-16/21	EEXF	30	6,405	6,415	30	EEXF
WkEnd 22-23/21	EEXF	30	7,235	7,240	30	EEXF
WK 19-21	EEXF	32	6,525	6,565	15	EEXF
WK 20-21	EEXF	30	7,405	7,430	30	EEXF
Jun 21	EEX	60	5,750	5,755	30	EEXF
Jul 21	GRFN	30	5,925	6,225	30	SPEC
Q3 21	BGC	5	6,425	6,445	30	EEXF
Q4 21	TFS	30	11,150	11,450	30	ICAP
Win 21	EEX	10	11,975	12,125	30	SPEC
Sum 22	GFI	30	11,675	12,065	25	EEX
2022	EEXF	10	12,435	12,750	10	GRFN
2023	EEXF	10	13,880	14,205	12	EEXF

EEX gas products in a commingled order book (spot + futures, broker + Ex's, physical + financial)

EEXS Physical gas products of EEX for the spot market

EEXF Financial gas products of EEX for the futures market

EEX Physical gas products of EEX for the futures market

Transaction and Clearing Fees

Contract	Transaction	Clearing	Total
TTF EGSI future			
TTF EGSI Day/WE/Week Future	0.005	0.01	0.015
TTF EGSI M/Q/S/Y Future	0.00175	0.002	0.00375
NCG EGSI future			
NCG EGSI Day/WE/Week Future	0.005	0.01	0.015
NCG EGSI M/Q/S/Y Future	0.0025	0.0025	0.005
CEGH VTP EGSI future			
CEGH EGSI Day/WE/Week Future	0.005	0.01	0.015
CEGH EGSI M/Q/S/Y Future	0.003	0.0025	0.0055

Product Setup of EGSI Futures

EGSI Futures	
Underlying	Corresponding EEX CEGH VTP European Gas Spot Index (EEX CEGH VTP EGSI) for the respective delivery period of the EEX CEGH EGSI Natural Gas Futures for the market area CEGH VTP, EEX NCG European Gas Spot Index (EEX NCG EGSI) for the respective delivery period of the EEX NCG EGSI Natural Gas Futures for the market area NCG, EEX TTF European Gas Spot Index (EEX TTF EGSI) for the respective delivery period of the market area TTF as determined and provided by EEX AG
Market Area	 CEGH VTP – in the Austrian Market Area East, operated by Central European Gas Hub AG; NCG – operated by NetConnect Germany GmbH & Co. KG / as of 01.10.2021 THE2 – operated by Trading Hub Europe GmbH, MAM for Germany; TTF – operated by Gasunie Transport Services B.V., TSO for the Netherlands.
Underlying Index	The respective EEX EGSI is determined as the arithmetic average of the daily values of the EEX Day EGSI for the gas delivery days included in the respective delivery period. The EEX Day EGSI – European Gas Spot Index is the volume-weighted average price for each delivery day calculated with all Day trades executed between 08:00-18:00 CET on the last exchange trading day before delivery
Contract volume	The contract volume is calculated by multiplying the number of delivery hours with the number of delivery days in the delivery period with the quantity to be delivered as specified in the respective reference contract.
Minimum Lot Size	1 contract or a multiple thereof
Tradable Delivery Periods	The next 14 Days, next 2 Weekends, current and next 4 weeks, current and respective next 6 (12 for TTF) full months, next 7 (for TTF 11) quarters, next 6 seasons, next 6 calendar years
Pricing	in € per MWh: to the third decimal place
Minimum Price Fluctuation	• in € per MWh: EUR 0.005 per MWh for order book trading and EUR 0.001 per MWh for trade registration; Minimum price fluctuation per contract is determined by multiplying the minimal price fluctuation per unit with the contract volume and the amount of delivery hours, respectively.
Cascading	 On the third ECC Business Day before the beginning of the delivery period, each open position in a Year Future is replaced by equivalent positions in the three Month Futures for the delivery months from January through to March and the three Quarter Futures for the second through to the fourth delivery quarter whose delivery periods together correspond to the delivery year. On the third ECC Business Day before the beginning of the delivery period, each open position in a Season Future is replaced by equivalent positions in the three Month Futures for the delivery months from October through to December (Winter-Season) or the three Month Futures for the delivery months from April through to June (Summer-Season) and the respective following Quarter Future. On the third ECC Business Day before the beginning of the delivery period, each open position in a Quarter Future is replaced by equivalent positions in the three Month Futures whose delivery months together correspond to the delivery quarter.
Final Settlement Price	The final settlement price corresponds to the values of the respective EEX CEGH VTP EGSI for the respective EEX CEGH VTP EGSI Natural Gas Futures, EEX NCG EGSI for the respective EEX NCG EGSI Natural Gas Futures, EEX TTF EGSI for the respective EEX TTF EGSI Natural Gas Futures on the Last Trading Day as determined and published by EEX AG.
Fulfilment	 The seller (buyer) is obliged to settle the difference between the settlement price of the previous ECC Business Day and the higher (lower) final settlement price in cash. For EEX EGSI Natural Gas Futures the final settlement price may be negative. Month Futures: Fulfilment by means of cash settlement on the ECC Business Day following the Last Trading Day based on the difference between the settlement price of Exchange Day before the Last Trading Day and the final settlement price. Week Futures: Fulfilment by means of cash settlement based on the final settlement price on the ECC Business Day following the day of determination of the final settlement price (as a rule Tuesdays). Weekend Futures: Fulfilment by means of cash settlement on the second ECC Business Day following the Last Trading Day. Day Futures: Fulfilment by means of cash settlement based on the final settlement price determined on the ECC Business day following the day the settlement price is determined. If the final settlement price is determined on a Saturday, Sunday or a public holiday, the cash settlement takes place on the second next ECC Business Day after the Last Trading Day.
Settlement Window	17:00 – 17:15 CET
Trading Window	08:00 – 18:00 CET
Last Trading Day	 Day Future is the last day at which the Day Contract with the same delivery period can be traded, Weekend Future is the Friday before the beginning of the delivery period, Week Future is the Friday of the current delivery period, Month Futures the last day the Day Contract or Weekend Contract for the last delivery day of the delivery month for the respective market area can be traded. Quarter/Season/Year Future is the third Exchange Day before the beginning of the delivery period. If one of the before mentioned Last Trading days is not an Exchange Day, the Last Trading Day is the previous Exchange Day.

Short codes of new EGSI Futures

EGSI Futures	Name
EEX TTF EGSI Future	
G301 – G334	EEX TTF EGSI Natural Gas Day Future
G3W1 – G3W5	EEX TTF EGSI Natural Gas Weekend Future
G3F1 – G3F5	EEX TTF EGSI Natural Gas Week Future
G3FM, G3FQ, G3FS, G3FY	EEX TTF EGSI Natural Gas Month, Quarter, Season, Year Future
EEX NCG EGSI Future (renaming	g into EEX THE EGSI Future as of 1 October 2021
GG01 – GG34	EEX NCG EGSI Natural Gas Day Future
GGW1 – GGW5	EEX NCG EGSI Natural Gas Weekend Future
GGF1 – GGF5	EEX NCG EGSI Natural Gas Week Future
GGFM, GGFQ, GGFS, GGFY	EEX NCG EGSI Natural Gas Month, Quarter, Season, Year Future
EEX CEGH VTP EGSI Future	
G801 – G834	EEX CEGH VTP EGSI Natural Gas Day Future
G8W1 – G8W5	EEX CEGH VTP EGSI Natural Gas Weekend Future
G8F1 – G8F5	EEX CEGH VTP EGSI Natural Gas Week Future
G8FM, G8FQ, G8FS, G8FY	EEX CEGH VTP EGSI Natural Gas Month, Quarter, Season, Year Future