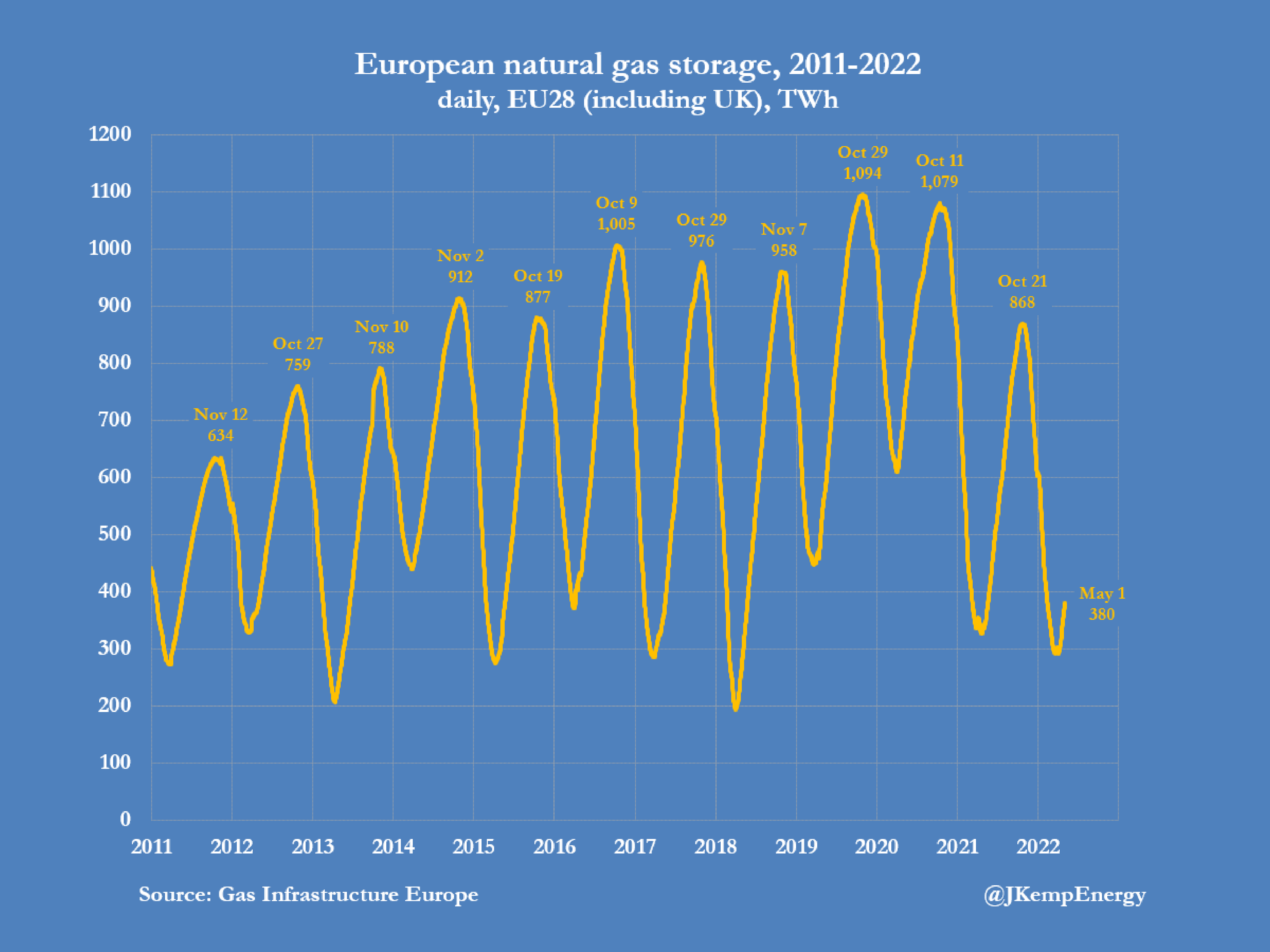
European gas inventories

Selected indicators

JOHN KEMP
REUTERS
4 May 2022


European natural gas storage, 2011-2022
daily, EU28 (including UK), TWh
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
Nov 12
634
Oct 27
759
Nov 10
788
Nov 2
912
Oct 19
877
Oct 9
1,005
Oct 29
976
Nov 7
958
Oct 29
1,094
Oct 11
1,079
Oct 21
868
May 1
380
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
Source: Gas Infrastructure Europe
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EU28 (including UK) natural gas storage

Date of post-winter minimum storage

Year	Date	TWh
2012	Mar 16	328
2022	Mar 19	291
2019	Mar 21	447
2014	Mar 28	439
2017	Mar 28	285
2016	Mar 30	371
2018	Mar 31	194
2020	Mar 31	609
2015	Apr 9	275
2013	Apr 12	207
2021	Apr 19	327

Source: Gas Infrastructure Europe
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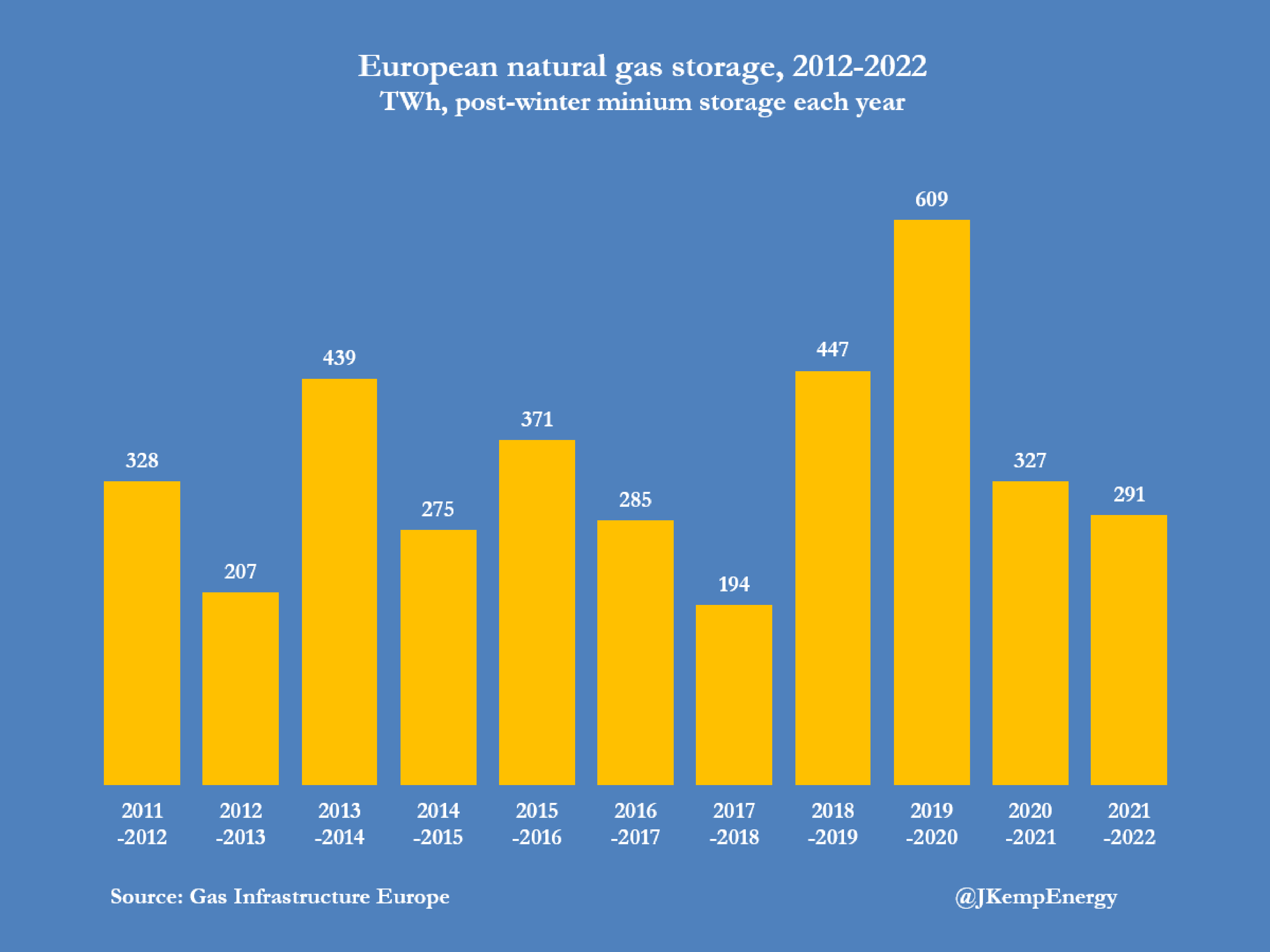
European natural gas storage, 2012-2022
TWh, post-winter minium storage each year
328
207
439
275
371
285
194
447
609
327
291
2011 -2012
2012 -2013
2013 -2014
2014 -2015
2015 -2016
2016 -2017
2017 -2018
2018 -2019
2019 -2020
2020 -2021
2021 -2022
Source: Gas Infrastructure Europe
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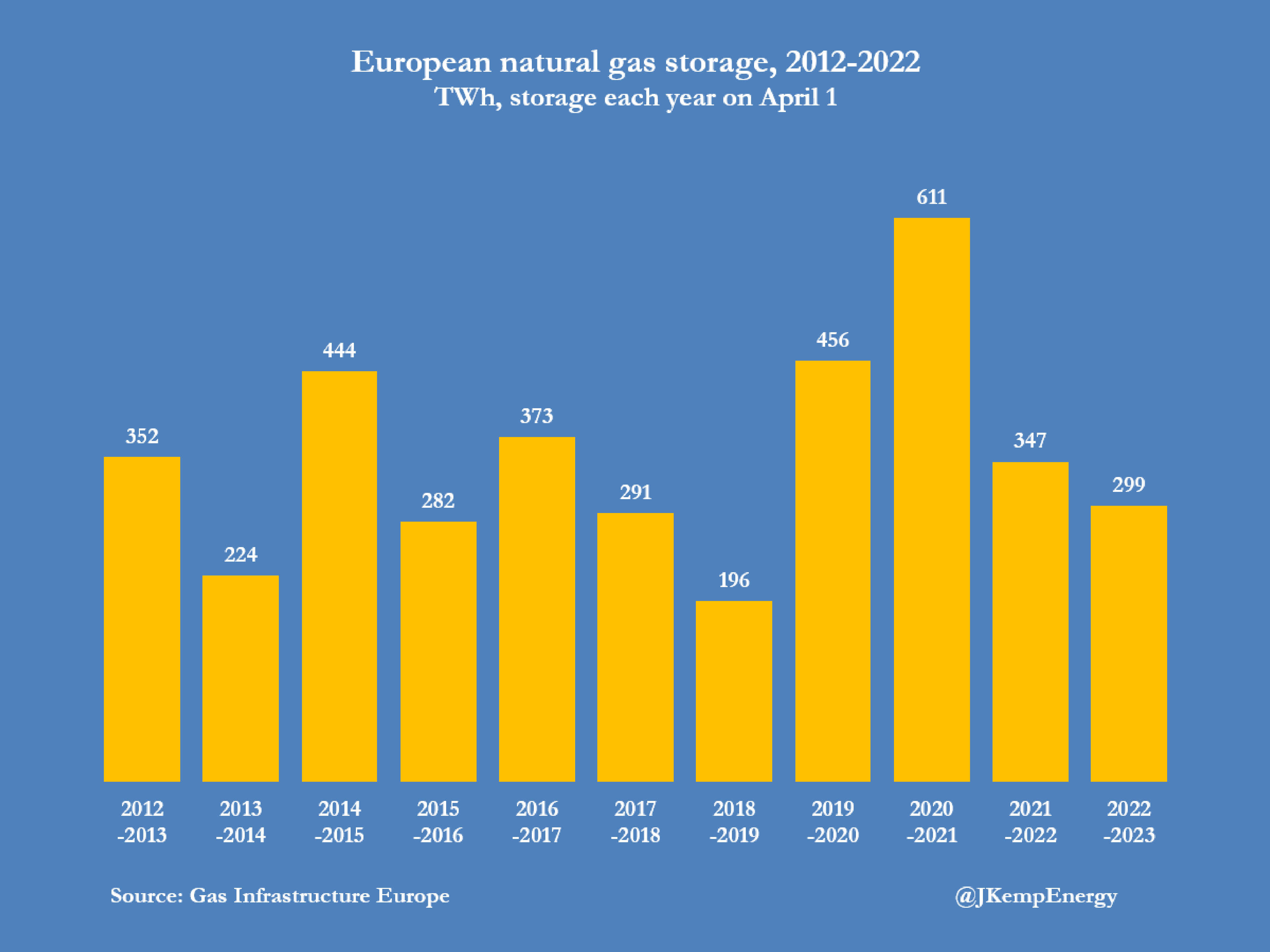
European natural gas storage, 2012-2022
TWh, storage each year on April 1
352
224
444
282
373
291
196
456
611
347
299
2012 -2013
2013 -2014
2014 -2015
2015 -2016
2016 -2017
2017 -2018
2018 -2019
2019 -2020
2020 -2021
2021 -2022
2022 -2023
Source: Gas Infrastructure Europe
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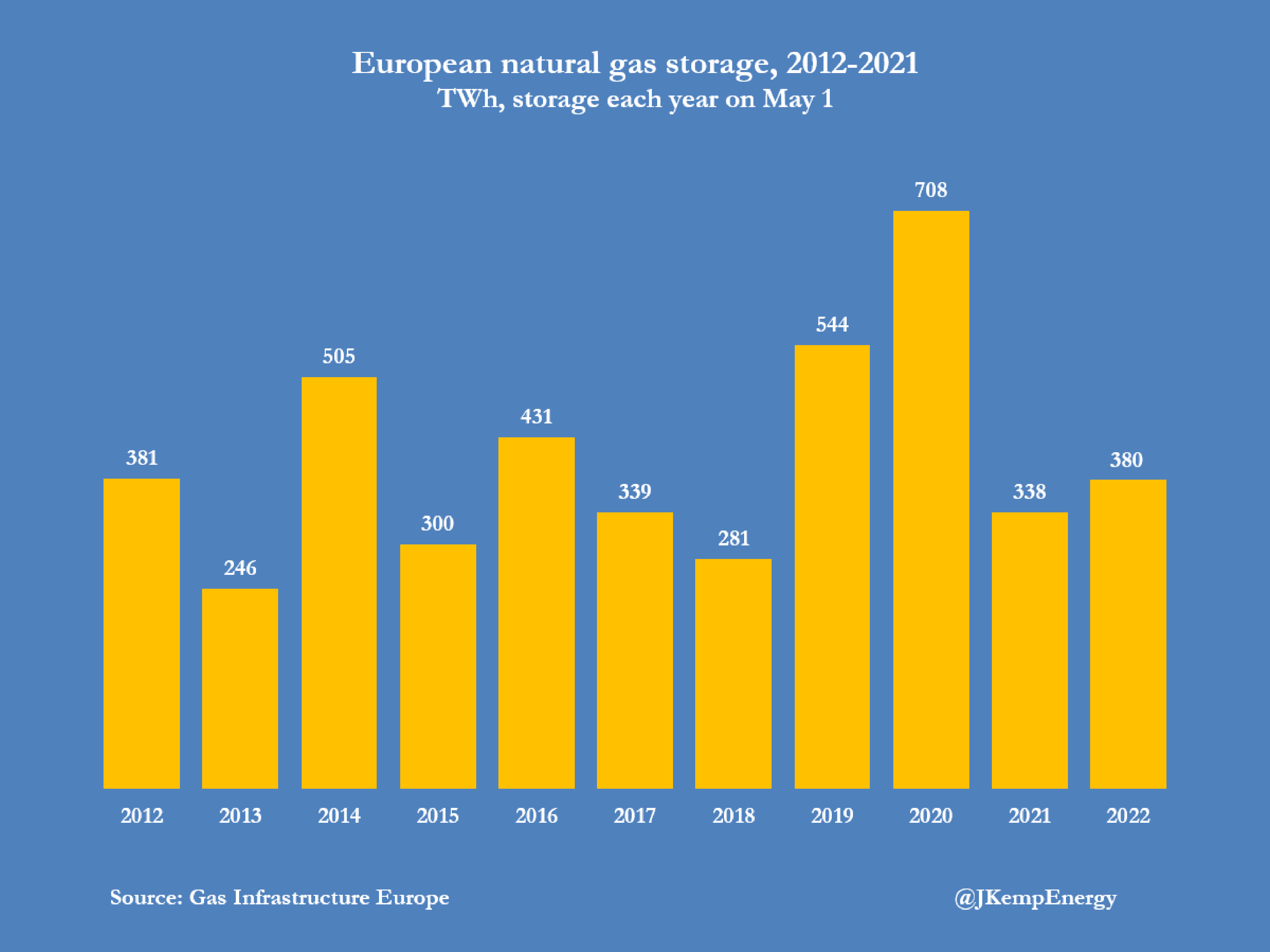
European natural gas storage, 2012-2021
TWh, storage each year on May 1
381
246
505
300
431
339
281
544
708
338
380
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
Source: Gas Infrastructure Europe
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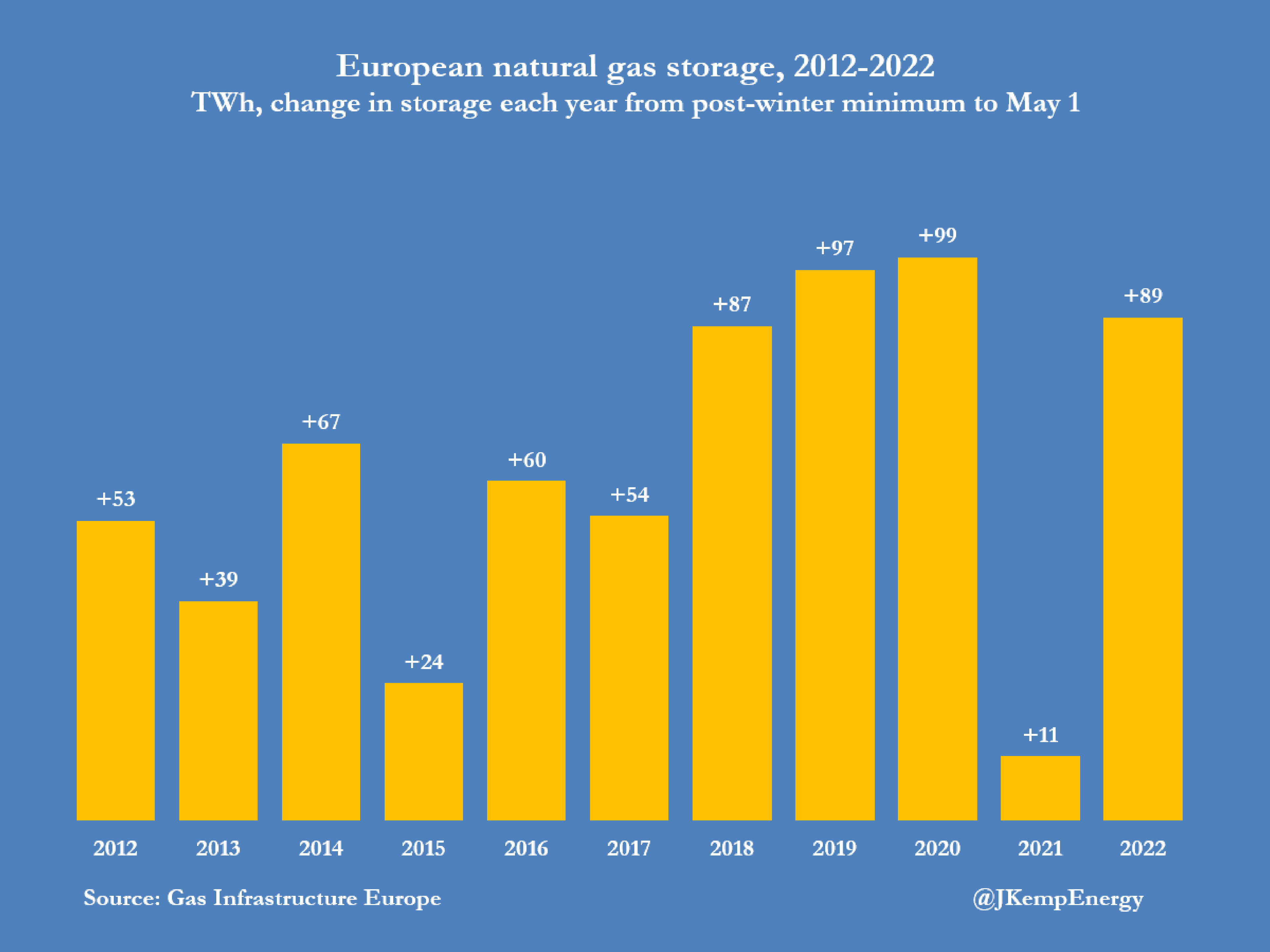
European natural gas storage, 2012-2022
TWh, change in storage each year from post-winter minimum to May 1
+53
+39
+67
+24
+60
+54
+87
+97
+99
+11
+89
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
Source: Gas Infrastructure Europe
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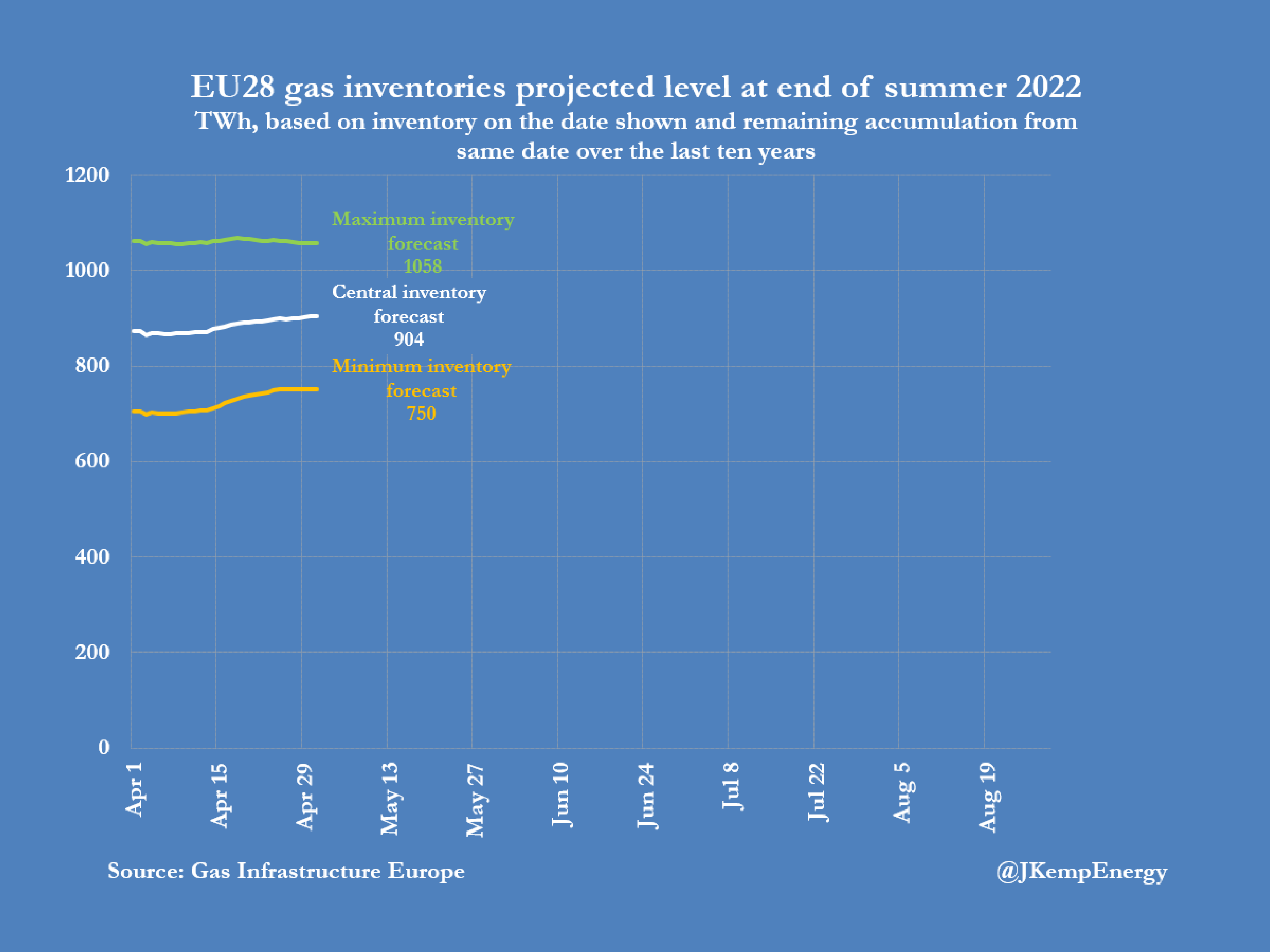
EU28 gas inventories projected level at end of summer 2022
TWh, based on inventory on the date shown and remaining accumulation from same date over the last ten years
1200
1000
800
600
400
200
0
Maximum inventory forecast 1058
Central inventory forecast 904
Minimum inventory forecast 750
Apr 1
Apr 15
Apr 29
May 13
May 27
Jun 10
Jun 24
Jul 8
Jul 22
Aug 5
Aug 19
Source: Gas Infrastructure Europe
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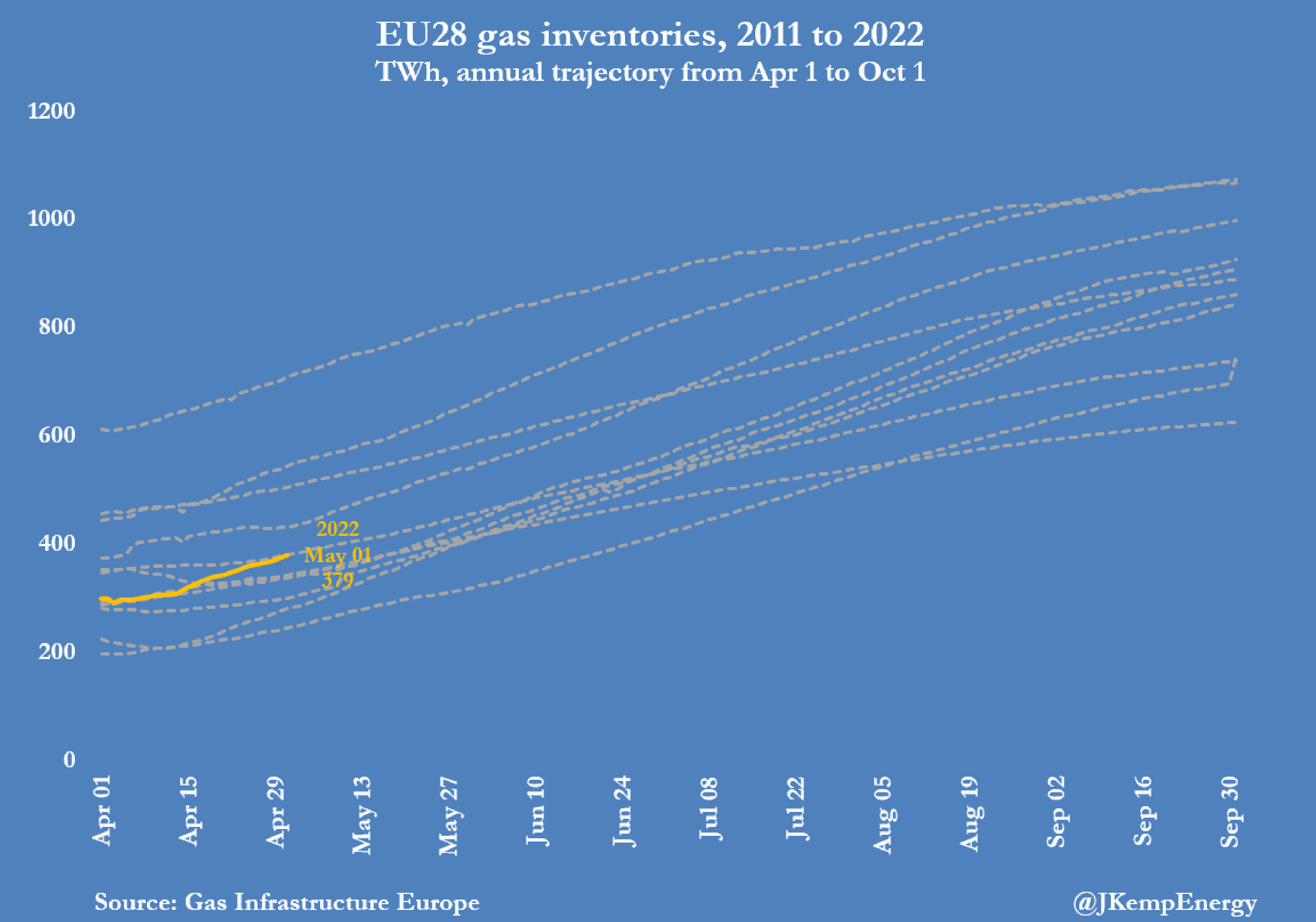
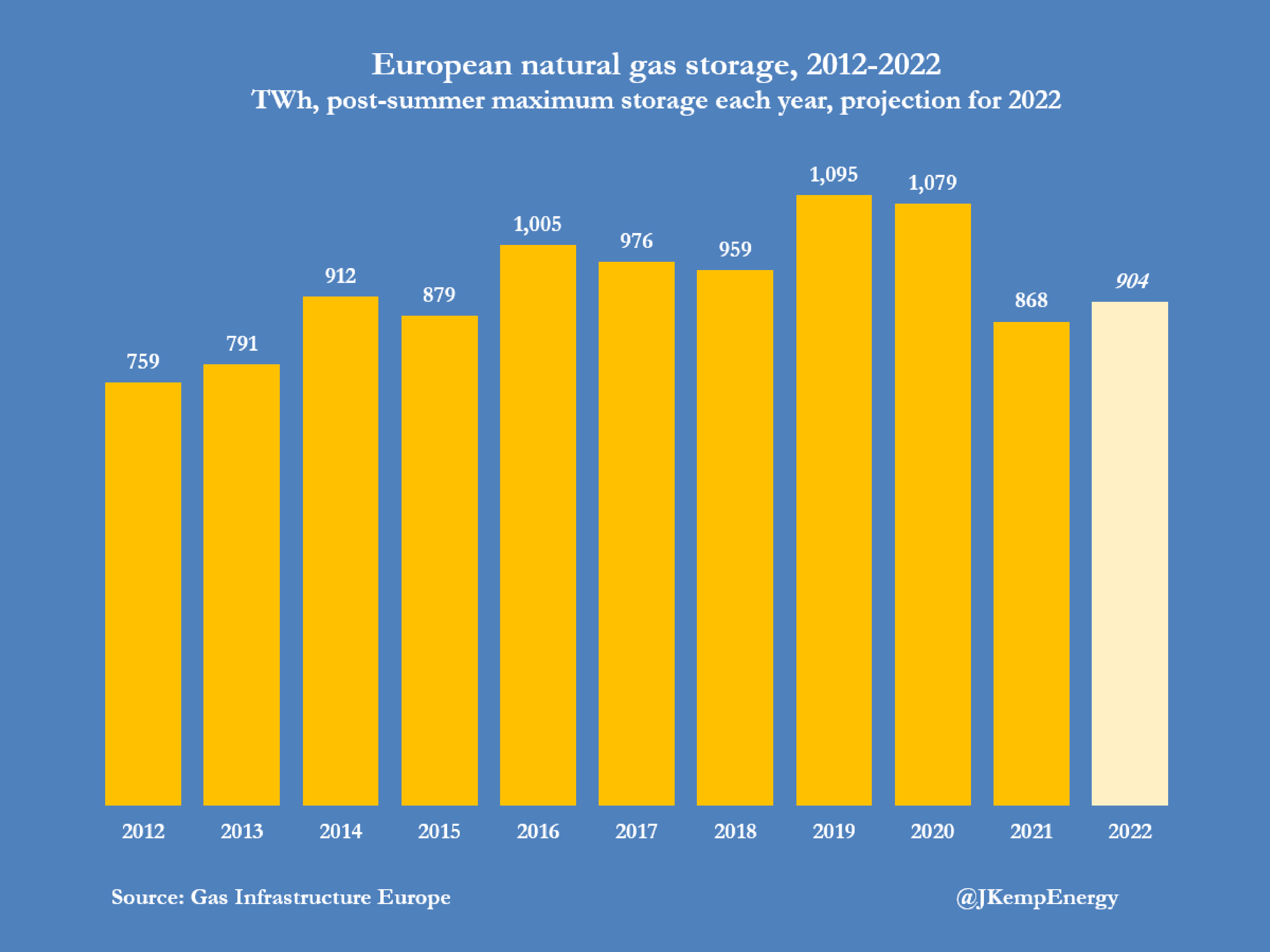


EU28 gas inventories, 2011 to 2022
TWh, annual trajectory from Apr 1 to Oct 1
1200
1000
800
600
400
200
0
2022
May 01
379
Apr 01
Apr 15
Apr 29
May 13
May 27
Jun 10
Jun 24
Jul 08
Jul 22
Aug 05
Aug 19
Sep 02
Sep 16
Sep 30
Source: Gas Infrastructure Europe
@JKempEnergy


European natural gas storage, 2012-2022
TWh, post-summer maximum storage each year, projection for 2022
759
791
912
879
1,005
976
959
1,095
1,079
868
904
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
Source: Gas Infrastructure Europe
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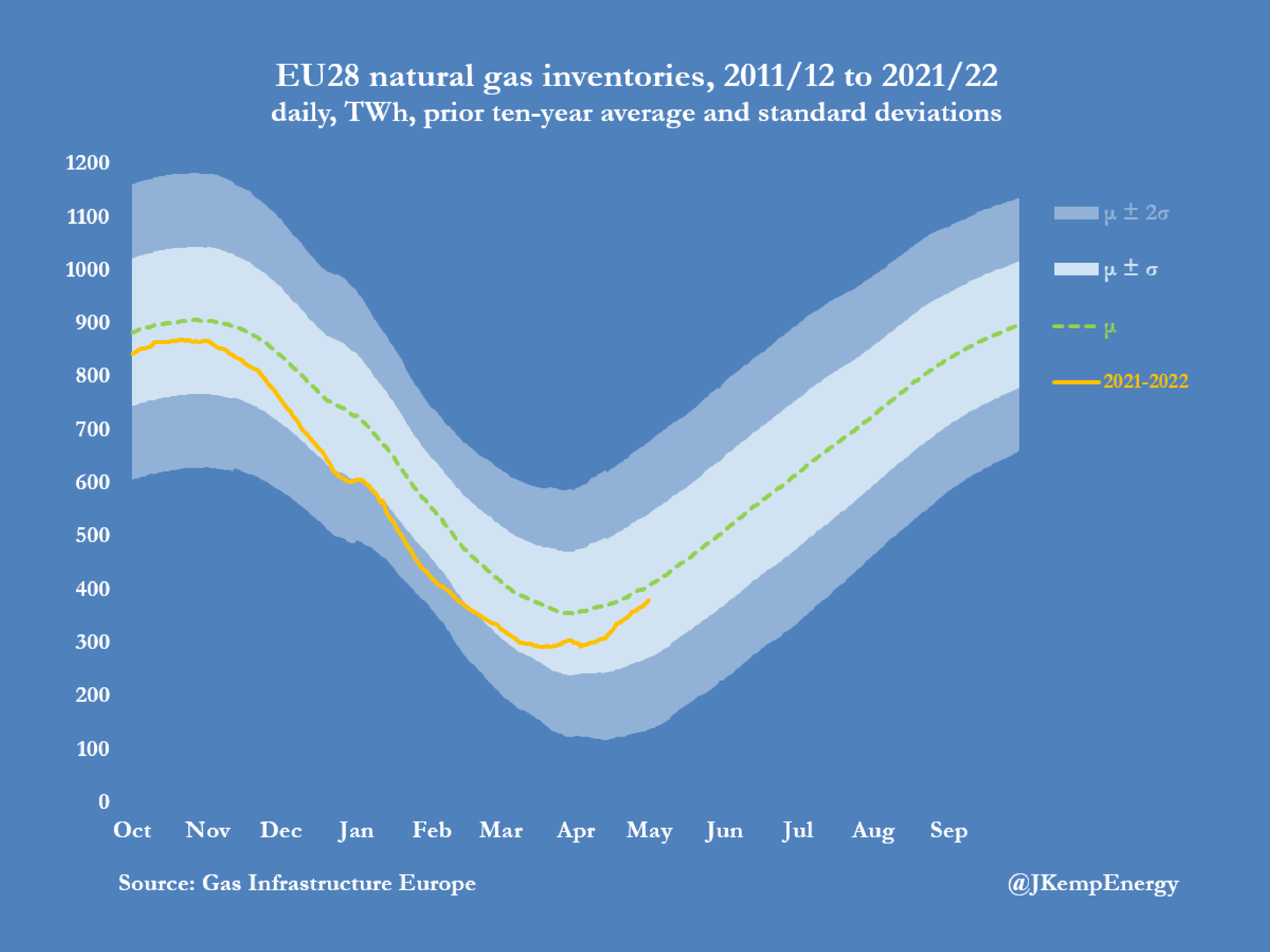
EU28 natural gas inventories, 2011/12 to 2021/22
daily, TWh, prior ten-year average and standard deviations
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
μ ± 2σ
μ ± σ
μ
2021-2022
Source: Gas Infrastructure Europe
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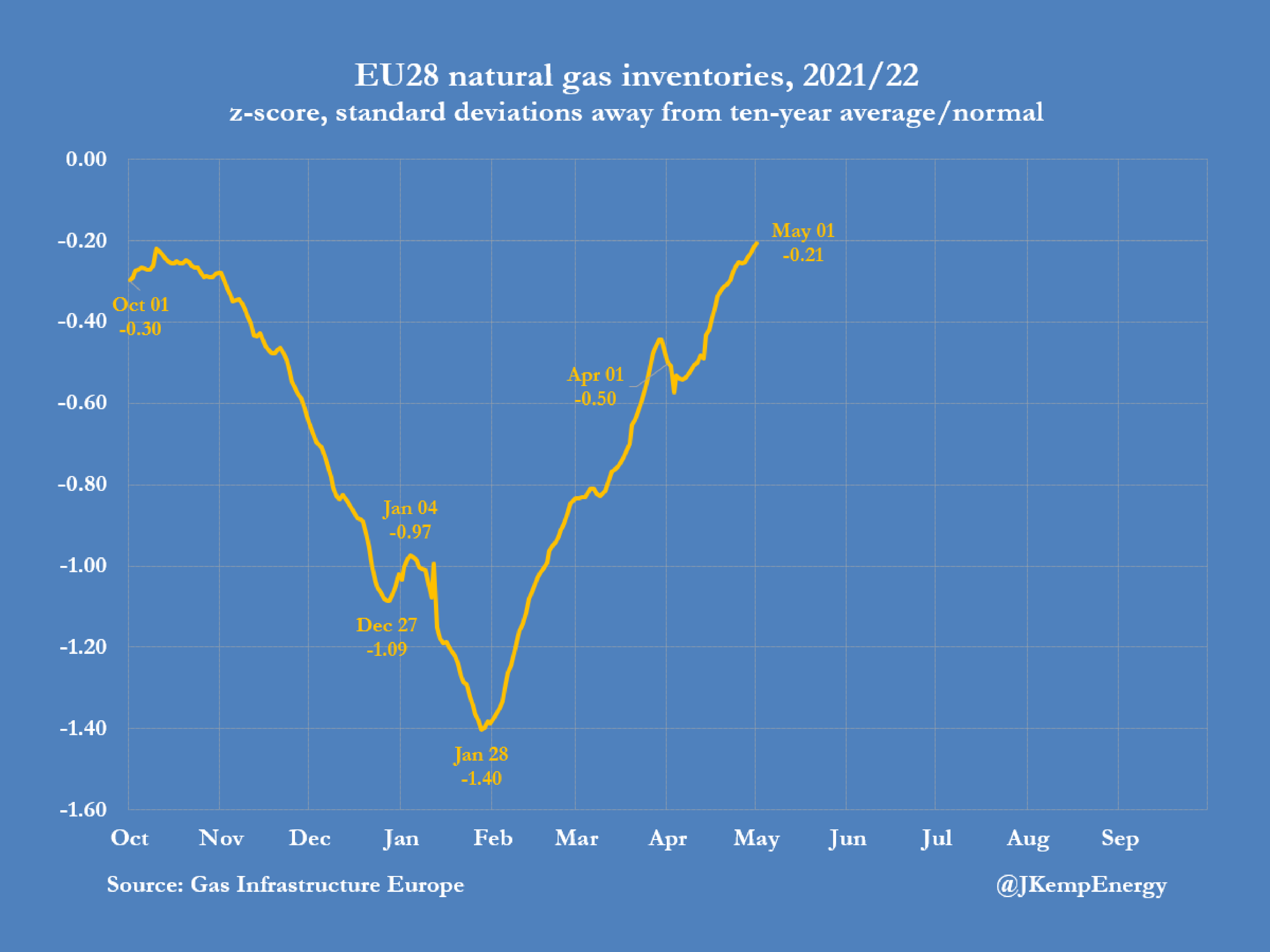
EU28 natural gas inventories, 2021/22
z-score, standard deviations away from ten-year average/normal
0.00
-0.20
-0.40
-0.60
-0.80
-1.00
-1.20
-1.40
-1.60
Oct 01
-0.30
Jan 04
-0.97
Dec 27
-1.09
Jan 28
-1.40
Apr 01
-0.50
May 01
-0.21
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Source: Gas Infrastructure Europe
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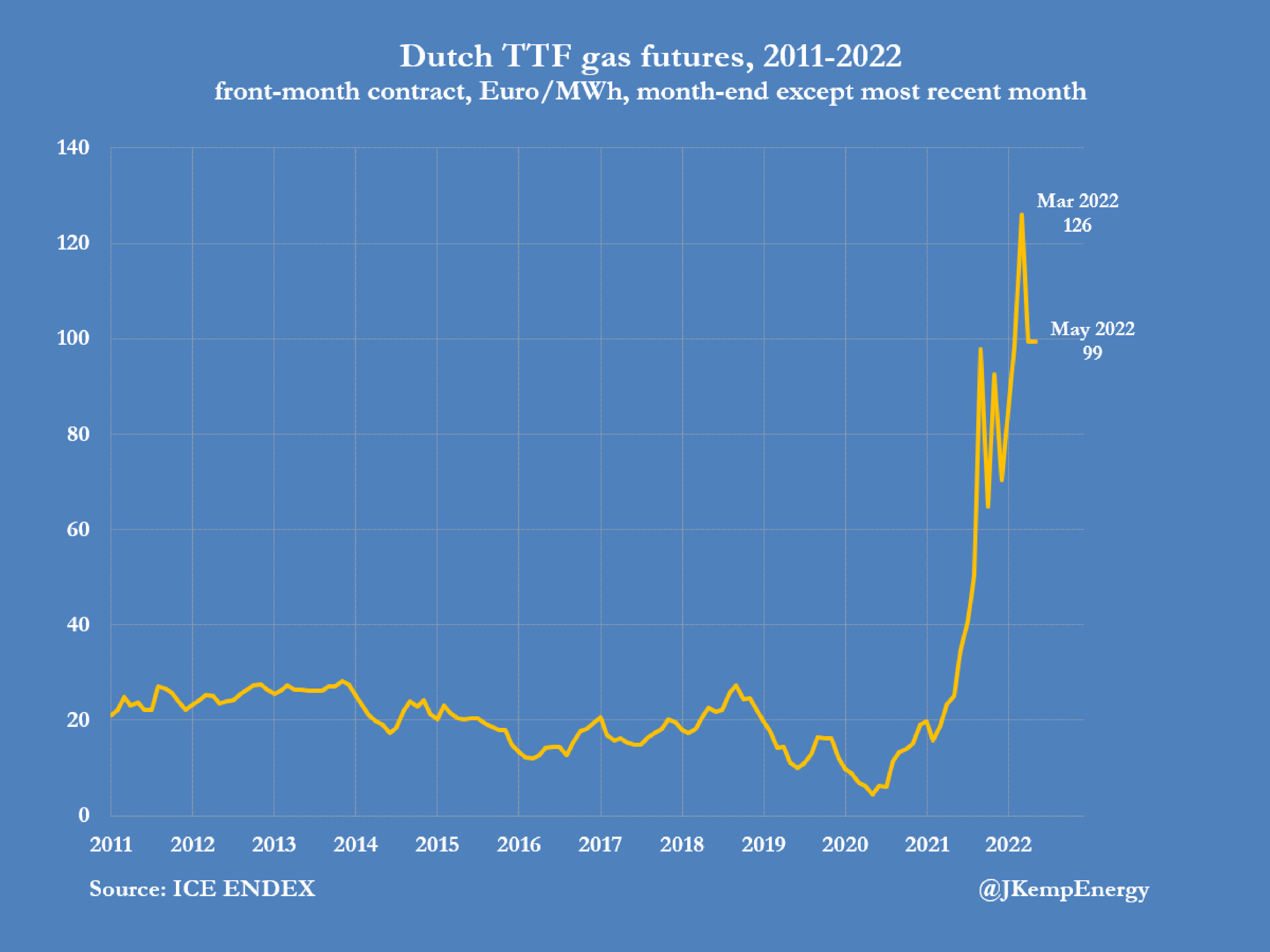
Dutch TTF gas futures, 2011-2022
front-month contract, Euro/MWh, month-end except most recent month
140
120
100
80
60
40
20
0
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
Mar 2022
126
May 2022
99
Source: ICE ENDEX
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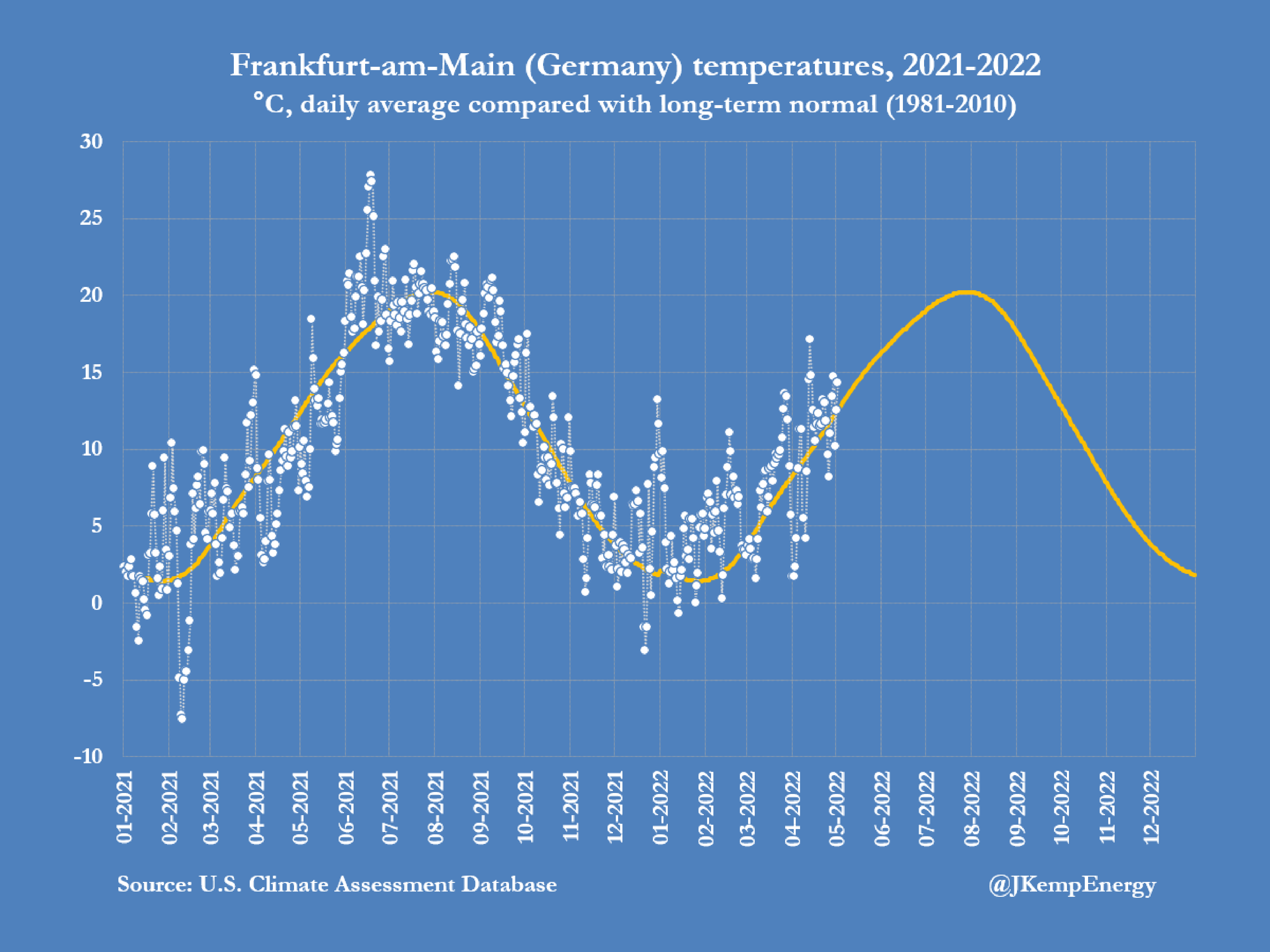

Frankfurt-am-Main (Germany) temperatures, 2021-2022
°C, daily average compared with long-term normal (1981-2010)
30
25
20
15
10
5
0
-5
-10
01-2021
02-2021
03-2021
04-2021
05-2021
06-2021
07-2021
08-2021
09-2021
10-2021
11-2021
12-2021
01-2022
02-2022
03-2022
04-2022
05-2022
06-2022
07-2022
08-2022
09-2022
10-2022
11-2022
12-2022
Source: U.S. Climate Assessment Database
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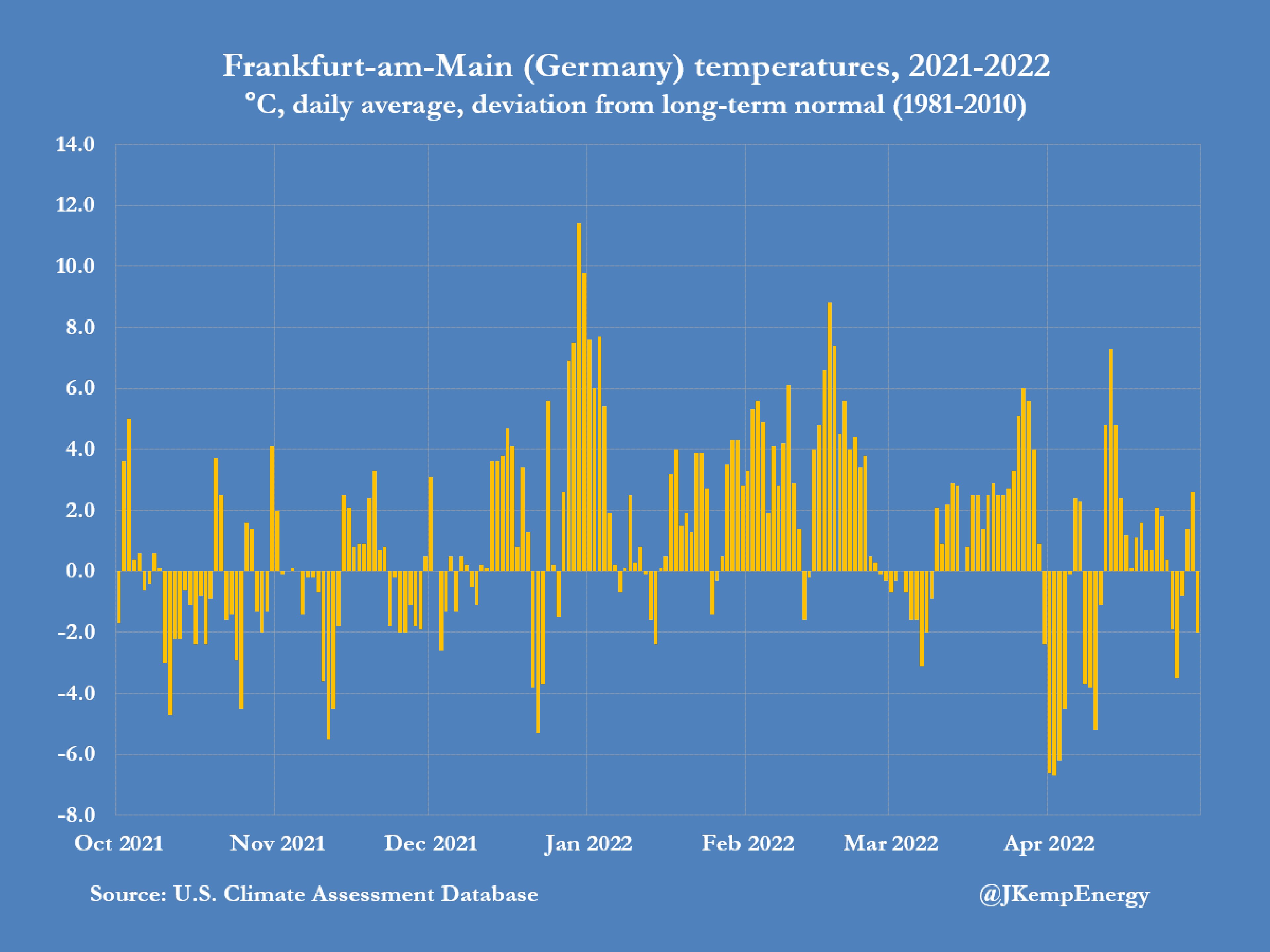
Frankfurt-am-Main (Germany) temperatures, 2021-2022
°C, daily average, deviation from long-term normal (1981-2010)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
-2.0
-4.0
-6.0
-8.0
Oct 2021
Nov 2021
Dec 2021
Jan 2022
Feb 2022
Mar 2022
Apr 2022
Source: U.S. Climate Assessment Database
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