

# Global Energy Policy Research | GEPR

GEPR  
http://agorajp.com/

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?? ?? · Friday, September 29th, 2023

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Ilari Nackel/iStock

Ilari Nackel/iStock  
Ilari Nackel/iStock

BASF 100 1.5 71  
EV BMW 17 EV

Ilari Nackel/iStock

2010 Ener  
giewende

2021 16 76  
2021 21 8 27 2022 5

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LNG

BASF 2600 2  
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Ilari Nackel/iStock

8% 3  
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EU  
261

IMF G7 2023 GDP

271



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1?JETRO????????2023?6?14??

2?JETRO????????2023?6?2??

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4????????????????http://www.de-info.net/kiso/wirtschaftspltk00.html#energie

5??BASF????????2600?????Bloomberg 2023?2?24??

62022/08/24  
BMWVW“PRESIDENT Online 2023/09/15

Posted in | No Comments »

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· Thursday, September 28th, 2023

20302035

carbon budget

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2050

Deltapoll22251033416

500Impax Asset Management Group PlcCEO

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Posted in ???, ????? | No Comments »

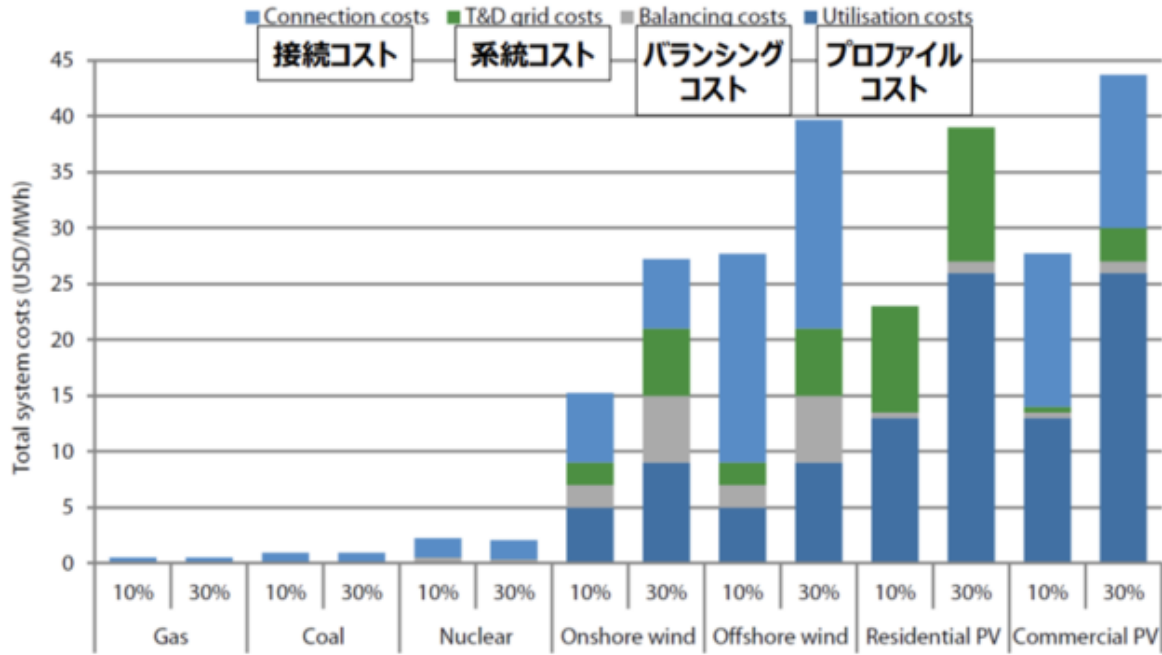
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?? ?? · Tuesday, September 26th, 2023



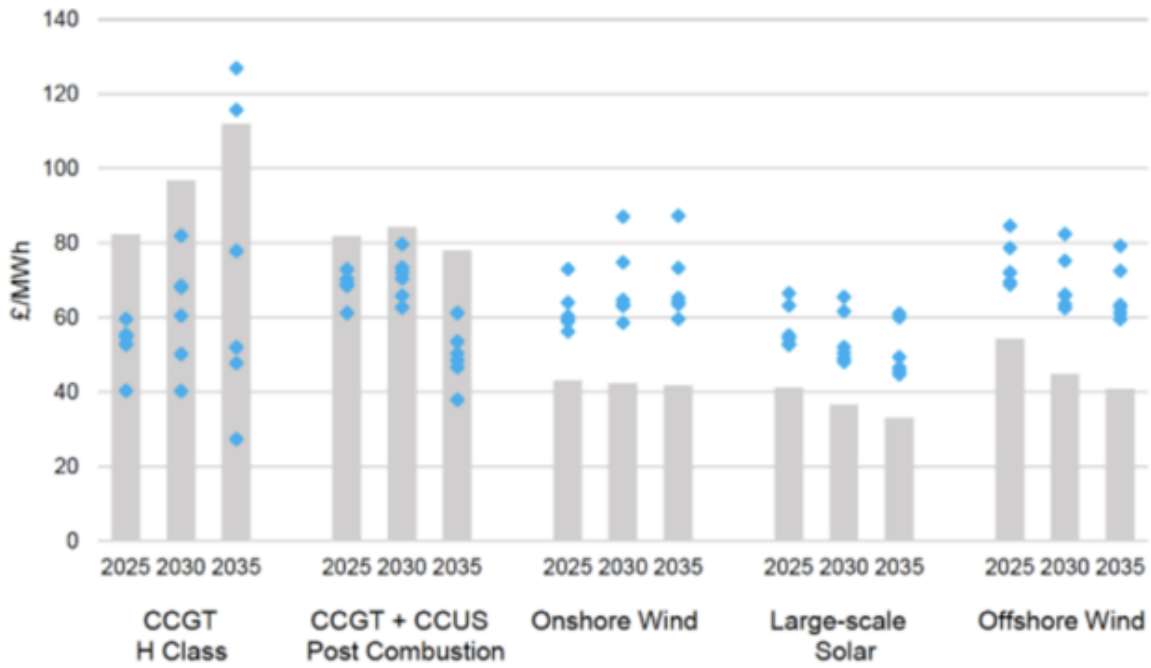
nitinan chumdavong/iStock





OECD The Full Cost of Electricity Provision 2018

BEIS Enhanced Levelized Cost of Electricity (LCOE) for CCS and other technologies. The chart shows LCOE trends for various technologies from 2025 to 2035.



BEIS Electricity Generation Costs 2022

LCOE for 2025 and 2035 for various technologies. For example, CCGT H Class LCOE is projected to decrease from approximately 40 £/MWh in 2025 to 28 £/MWh in 2035.

LCOE for 2035 for various technologies. For example, Onshore Wind LCOE is projected to be around 60 £/MWh in 2035.

????????????????????????????????2021?8??  
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Posted in ??????????, ??? | No Comments »

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?? ?? · Thursday, September 21st, 2023



Maks\_Lab/iStock

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Posted in ??????????, ???, ????? | No Comments »

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?? ?? · Tuesday, September 19th, 2023

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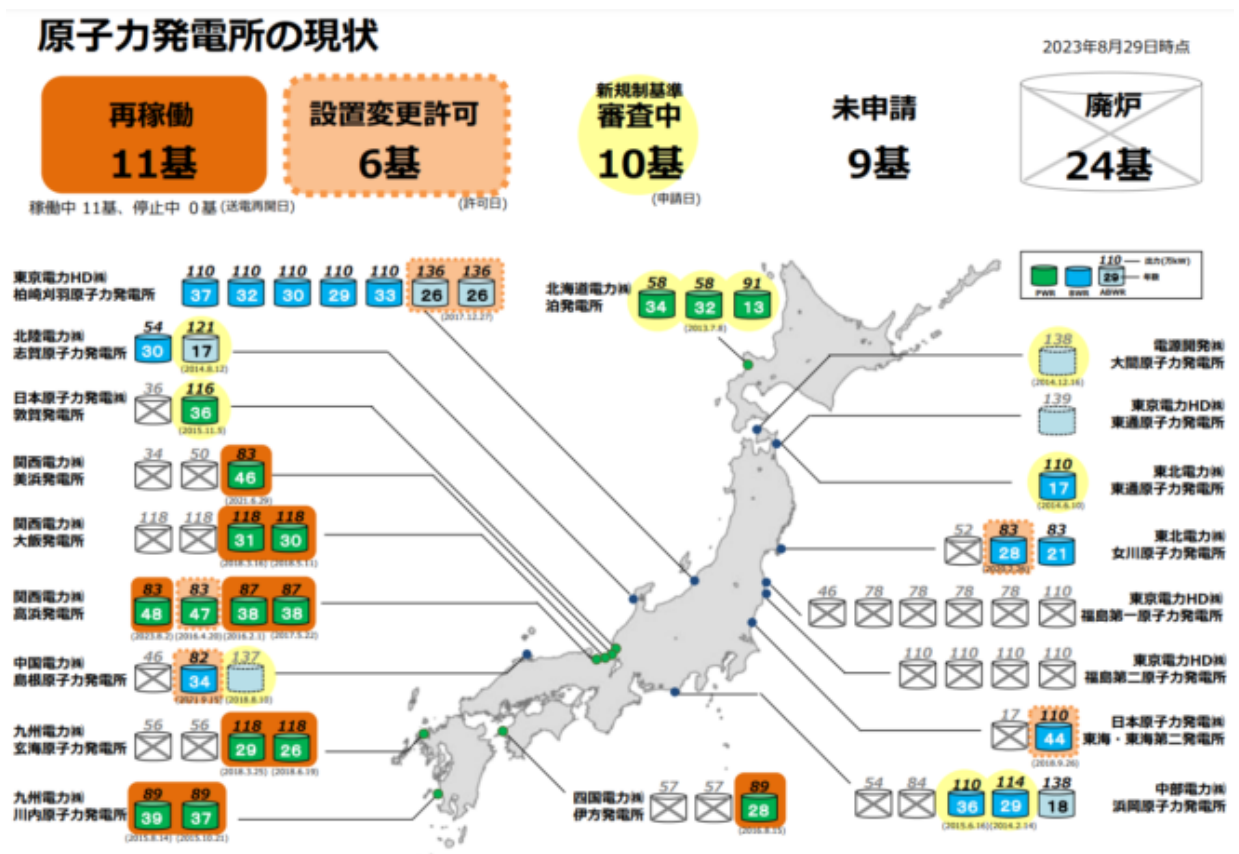
????????????????????MI??2022??  
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— ??????? (@atomic\_journal) September 15, 2023

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Posted in ??????????, ??? | No Comments »

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?? ??? ?? · Tuesday, September 12th, 2023



Gwengoa/iStock

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CSU CSU

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10875 1 6 36

Wikipedia

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Posted in [??, ??](#) | [No Comments](#) »

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???Quantum Korea 2023??

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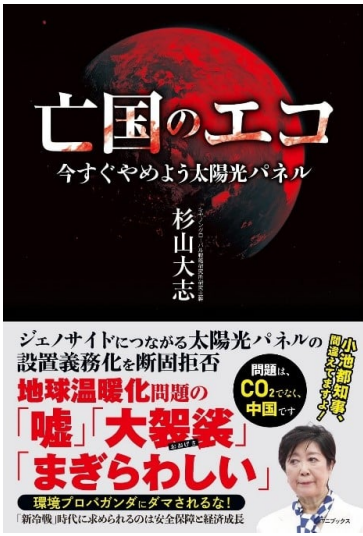
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Posted in ???, ????? | No Comments »

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?? ?? · Saturday, September 2nd, 2023



axz66/iStock

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G7????1.5????2050????????  
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**EU????65?**

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CBAM????

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1.5????

????1.5????

Posted in ??????????, ???, ????? | No Comments »

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?? ? · Monday, August 28th, 2023



dima\_zel/iStock

??GCR????????????????[PDF](#)????12????  
??16????????????????????????????5????????????????????

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R?????C<sup>14</sup>????????????????????????????

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Fig. 4?????GCR?????3?????GCR?????GCR?????

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Posted in ???, ????, ???? | No Comments »

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?? ?? · Sunday, August 27th, 2023

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????????????IPCC????????????1.5????????????1.5????????????  
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### Don't overstate 1.5 degrees C threat, new IPCC head says

????????????Woke,  
Inc.: Inside Corporate America's Social Justice  
Scam????????????

### Vivek Ramaswamy says the 'climate change agenda' is a hoax

????????????Climate Change isn't  
Everything????????????





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Posted in ??????????, ??, ???????? | No Comments »

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?? ?? · Thursday, August 24th, 2023



NithidPhoto/iStock

2023?8?22?????????????????????9??

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- ??9?????????????
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??2050????????????????????2030??CO2????46%????????????????  
GX??

2022?3?15??



??CO2????2030?46%????????????????????????  
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GX??CO2????????????????????????????????????  
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?SDGs????????

Posted in ??????????, ??? | No Comments »

????2??????CO2????????????????????????

?? ?? · Tuesday, August 22nd, 2023



Artur/iStock

MIT heavily saturated EPA

**CO2**

CO2

CO2

CO2 80

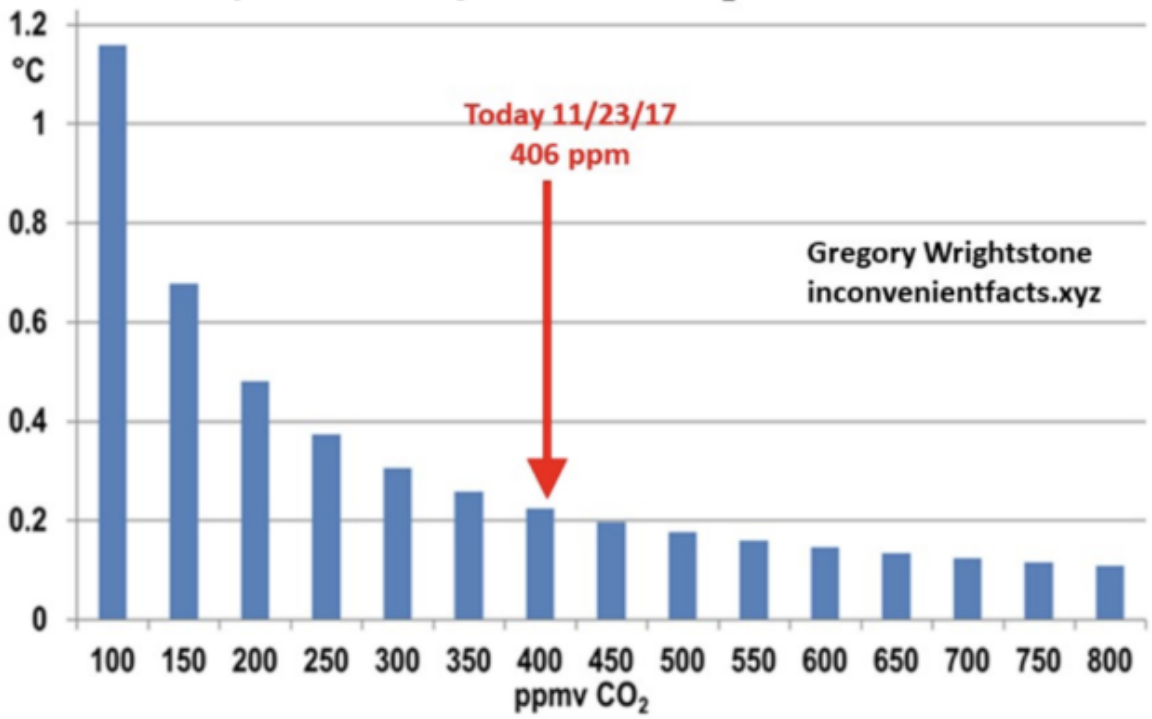
40 Gt CO2 1

CO2

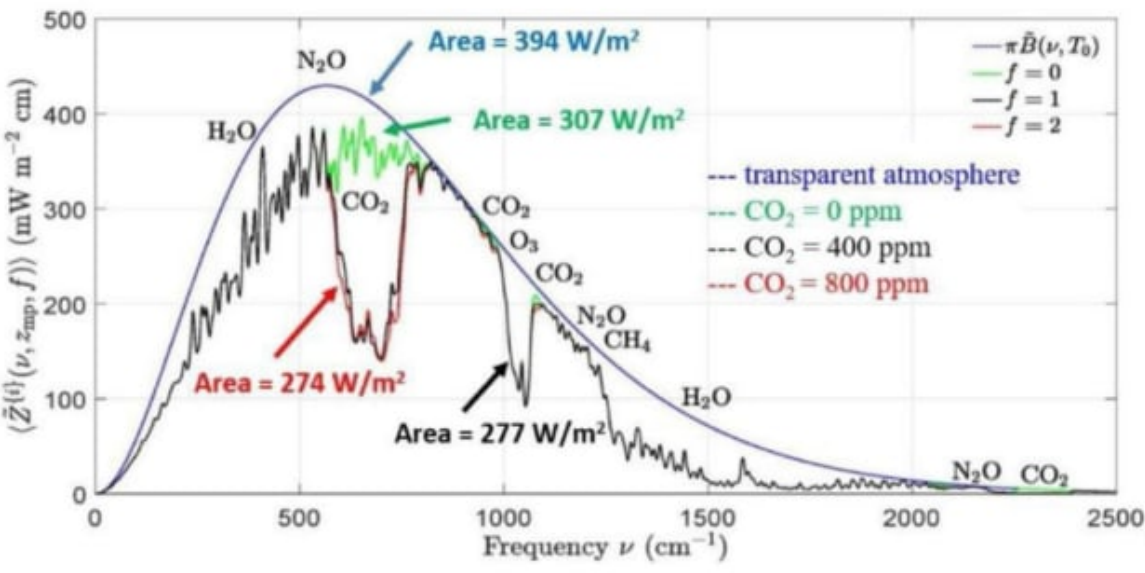
**CO2 heavily saturated**

CO2 50ppm CO2 saturation CO2 heavily saturated

Figure I-3: Less global warming for each additional 50 parts-per-million-by-volume of CO<sub>2</sub> concentration



?????CO2????2?800ppm????????????????????CO2????????????????????  
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 ?????????????????????CO2????????????????????CO2?N2O?O3?CH4????????????  
 ??394 W/m<sup>2</sup>????????????????????@transparent atmosphere????????????27??



????????????????????CO2  
 400ppm????394W/m<sup>2</sup>????277W/m<sup>2</sup>????????????????????277/394  
 70????????CO2?400ppm??800ppm????????????????274  
 W/m<sup>2</sup>?69.5%????????????????3W/m<sup>2</sup>????????????1?????????

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? State Farm Test: ???

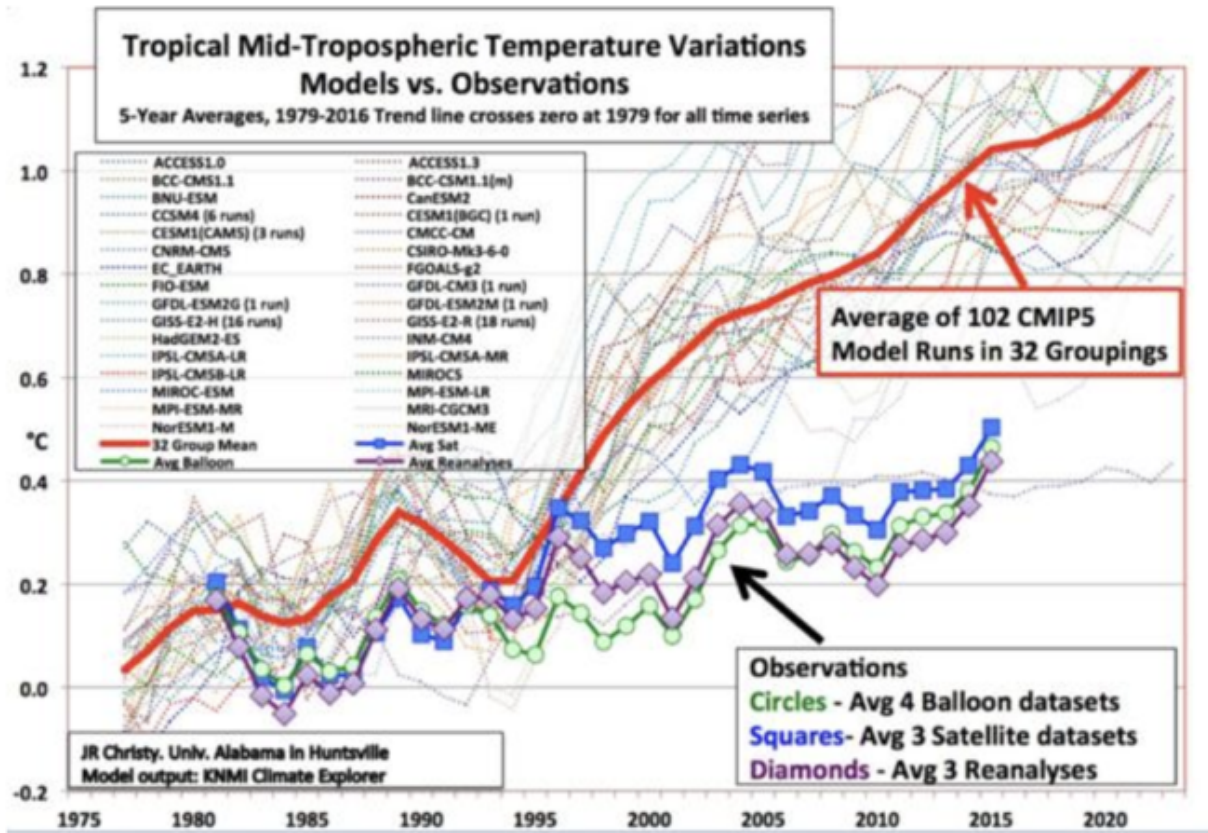
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1. EPA????????????????????????????????????
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The main conclusion of this part of the study is that even an order of magnitude increase of CO2 in the atmosphere by human activities, which at the present rate of input is not expected within the next several thousand years, may not be sufficient to produce a runaway greenhouse effect on Earth. On the short time scale, if CO2 is augmented by another 10 percent in the next 30 years, the increase in the global temperature may be as small as 0.1°K.

Posted in ???, ????? | No Comments »

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?? ?? · Friday, August 18th, 2023



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Luisa Trescher Photos/iStock



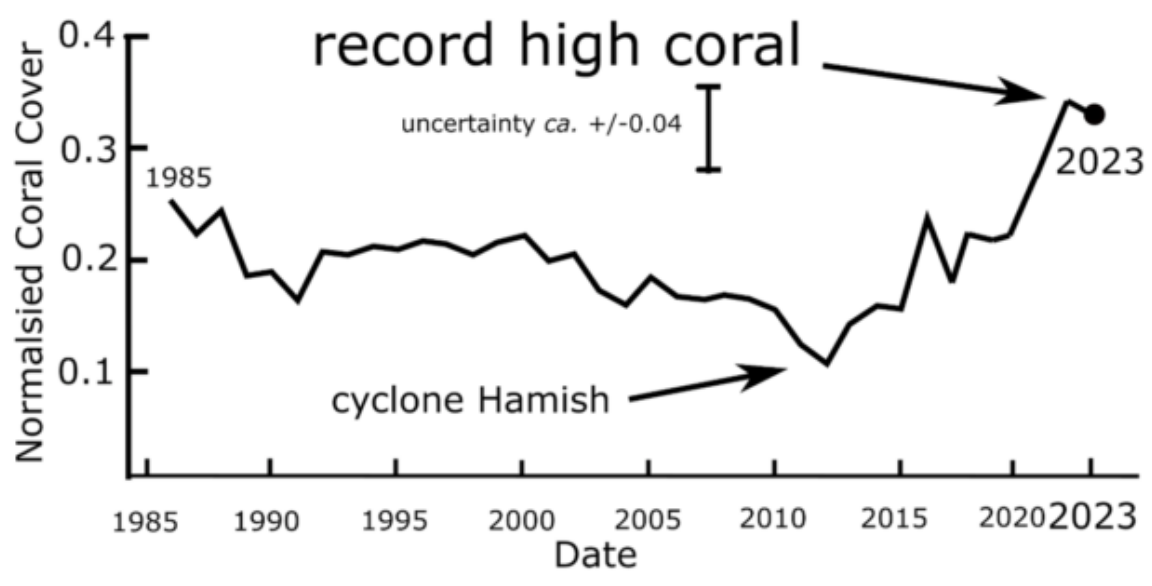
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60????????????????????

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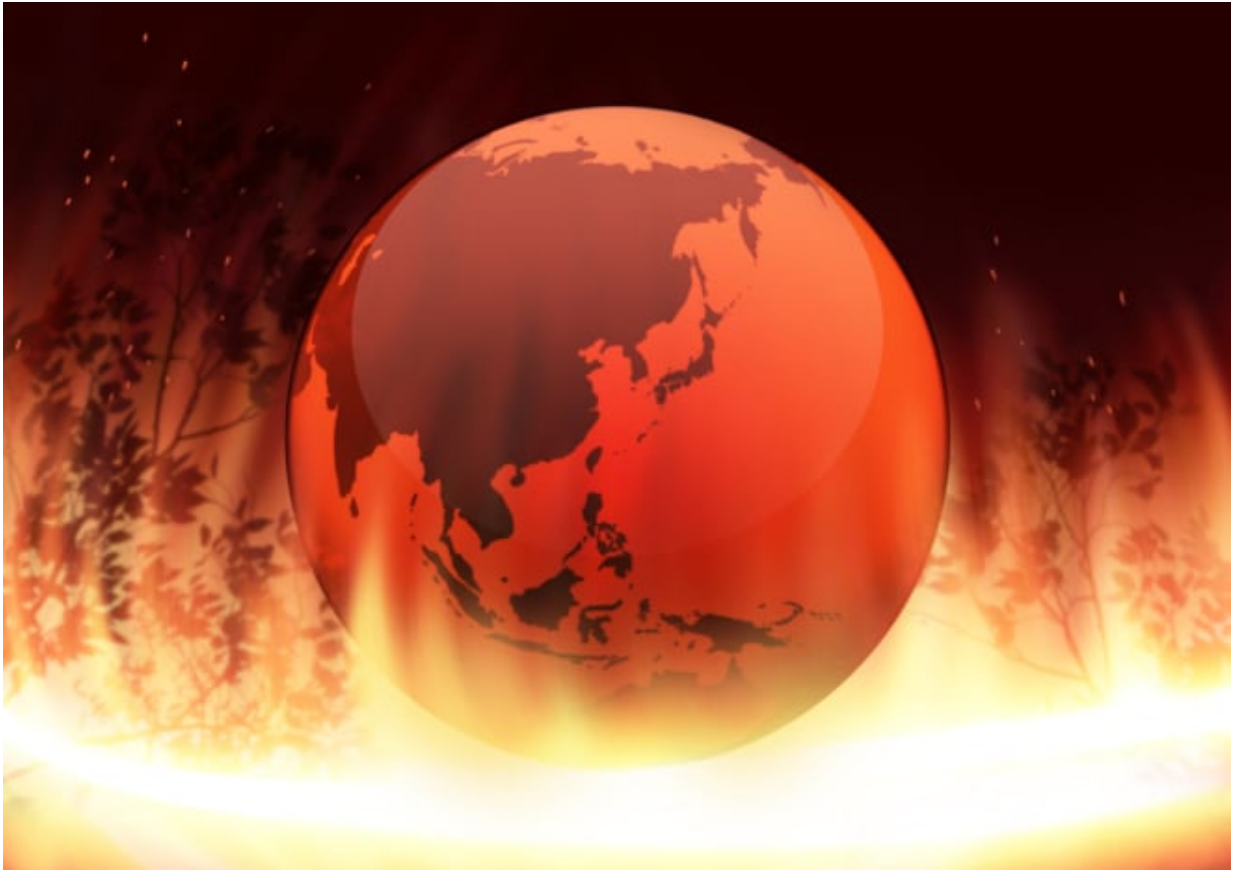
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Tr6/iStock

global warming global boiling

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2023 “”

100 15 100

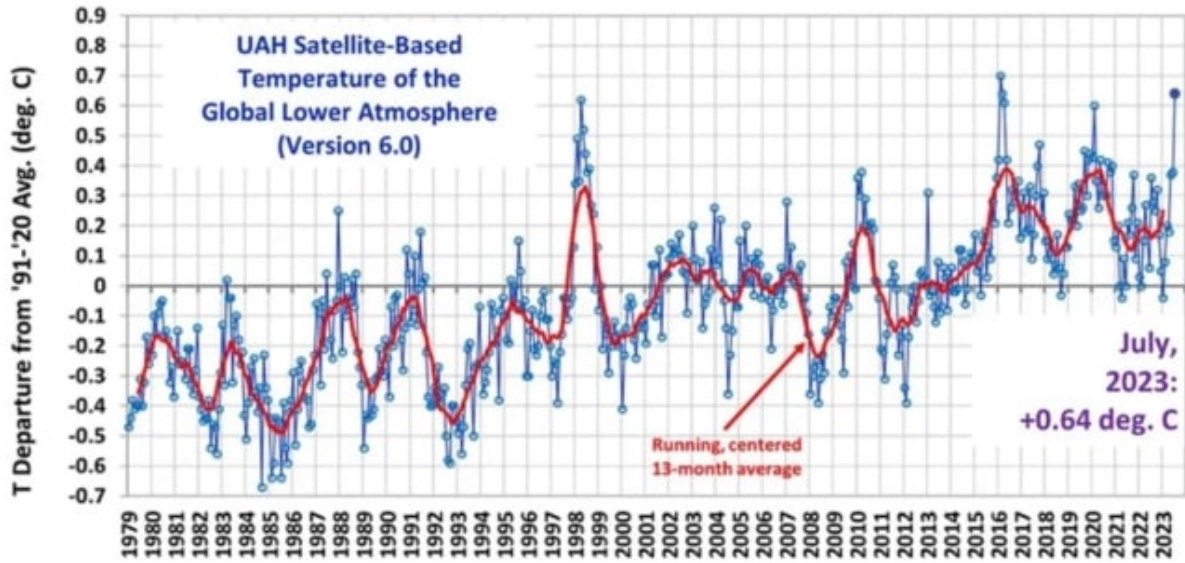
50 5

BBC 1



Climate Etc.

9000 UAH



3

Climate Etc.

2023

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2 1 3

2023 4 1 2 1 7







CO2  
CO2

CO2  
CN

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95

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CN  
CO2  
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2009  
4  
14  
S. Matsuda?“ Validity of Bio-Ethanol as a Countermeasure against Global Warming”, J. Environ. Inf. Sci. , Vol.37, No.5, pp.1-6 (2009.3)?

CO2

CO2  
CO2  
2-09  
p.55  
Table 2?

HP  
Vol.44  
vol.37

CO2  
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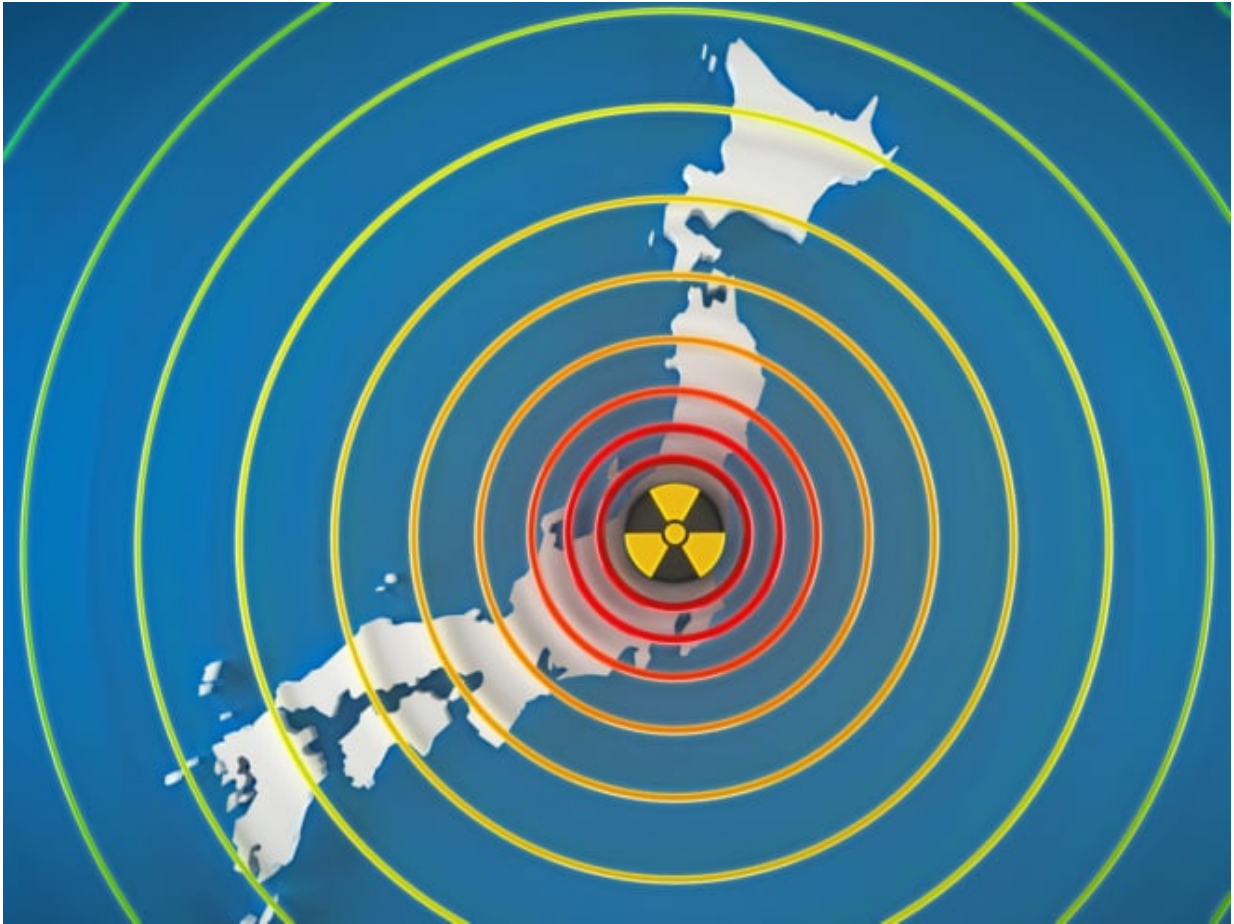
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?? ?? · Thursday, August 3rd, 2023





adventtr/iStock

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← ツイート



村本大輔(ウーマンラッシュアワー)  
@WRHMURAMOTO

...

事故があった時、地元の人だけじゃなく日本中が被爆しますように

**NHKニュース** @nhk\_news · 7月28日

福井県にある関西電力の高浜原子力発電所1号機が、28日午後、原子炉を起動し、12年ぶりに再稼働します

[www3.nhk.or.jp/news/html/2023...](http://www3.nhk.or.jp/news/html/2023...)

#nhk\_video

高浜原発1号機 きょう午後 再稼働

AI自動音声でお伝えしています

福井

資料

▼12年ぶり再稼働 来年運転開始から50年

▼運転期間 原則40年超え再稼働 2例目

NHK 0:28

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/Mark?I????????????????????PWR??  
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bluejayphoto/iStock

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Posted in ???, ??, ????? | No Comments »

# ????????G20????????

?? ? · Monday, July 31st, 2023

7?22????G20??2022????????????  
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NHK??

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**some**  
**members??**??  
**others??**??



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1.5°C COP 2050

G7

2050

G7 G20

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2030

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3 G20 G7 2030 150GW 1TW

COP27

G20 12 COP28

UAE

- 2030
2030
2030
???

G20

G20 1.5°C by or around mid century G20

1.5

Posted in ... | No Comments »



AR6?COP26????????????????????1.5????????????????IPCC????????????2014????5????  
?AR5????2021????????1.5??

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0????1.5????????????????????????

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SPM????????????GHG????????????????????????????

????????1.5????????2019????????????500????CO<sub>2</sub>e????????2????????1150????  
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????2020????????50????GHG????????1.5????????10????23????7????  
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??AR 6-  
SPM?TableSPM.1????2????????????????GHG????2050??2019??64????2030??  
21????????2070????????Table

SPM.1?1.5????????2030?43??2050?84????????<sup>22</sup>?

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??AR6????1.5????????1.7?1.8????????1.5????  
????500????500????1.5????1150????2????825????  
????825????????GHG????1.5????

AR6????????????????????1.5????????

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AR6-SPM?C.2.4

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AR6-SPM?C.2.4  
2  
39

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2  
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1.5 AR6-SPM?P26



1.5  
24

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1.5  
IPCC AR6  
1.5  
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2030?21 GHG AR6-SPM?C.2.4

1.5 30?43?50?84 AR6-SPM?C.2.5



imply??  
59

1.5

AR6  
26  
???

IPCC

AR6  
2  
1.5

????????IPCC??

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?1.5??2????  
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?????IPCC

AR6??1.5????????????  
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?1?AR6-SPM?B5.2????????1.5??

????????GHG????CO2????????1.5????2050?99????2030?48????????????30????50????????????

?3?AR6.SPM?C.2.4?“Even without accounting for all the benefits of avoiding potential damages the global economic and social benefit of limiting global warming to 2°C exceeds the cost of mitigation in most of the assessed literature” (medium confidence)

?4?AR6-SMP P26 ??50?“The evidence is too limited to make a similar robust conclusion for limiting warming to 1.5°C. Limiting global warming to 1.5°C instead of 2°C would increase the costs of mitigation, but also increase the benefits in terms of reduced impacts and related risks, and reduced adaptation needs.”

?5?AR6.SPM C.2.5: “Ambitious mitigation pathways imply large and sometimes disruptive changes in existing economic structures, with significant distributional consequences within and between countries.”

?6?AR6-SPM E.1.3: “Strengthened and coordinated near-term actions in cost-effective modelled global pathways that limit warming to 2°C (>67%) or lower, reduce the overall risks to the feasibility of the system transitions, compared to modelled pathways with relatively delayed or uncoordinated action.”

Posted in ???, ????? | No Comments »

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?? ? · Saturday, July 29th, 2023





Posted in ???, ????? | No Comments »

# ?????CO2????????????????????

?? ?? · Thursday, July 27th, 2023



JaCZhou/iStock

?????CO2????????????????????2023?7?4??Enrico Mariutti????????????????????????????????????The Dirty Secret of the Solar Industry???

????????????????????CO2??CO2????????????????IEA?IPCC??

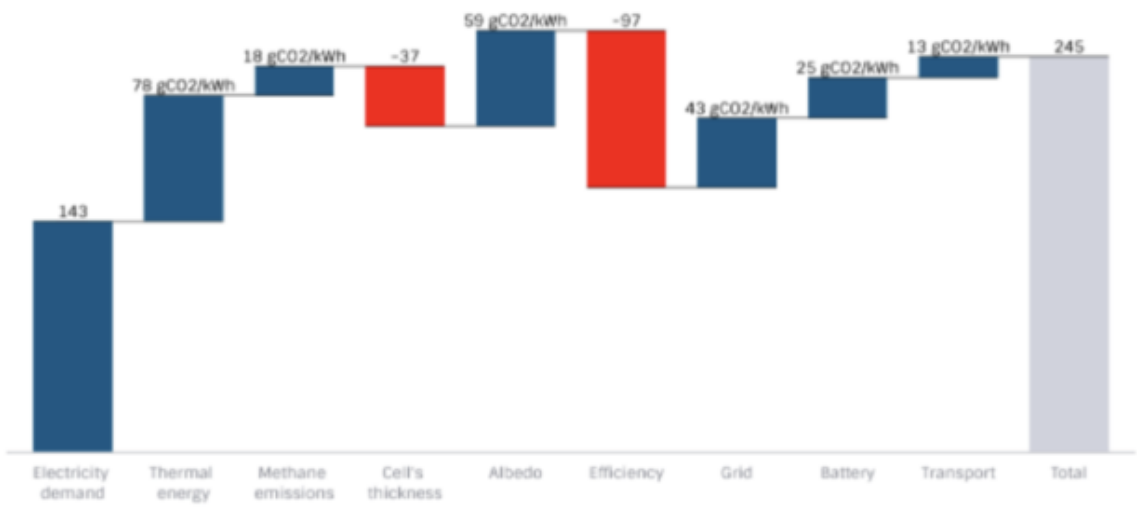
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- ???CO2????????????
- ???CO2????????????
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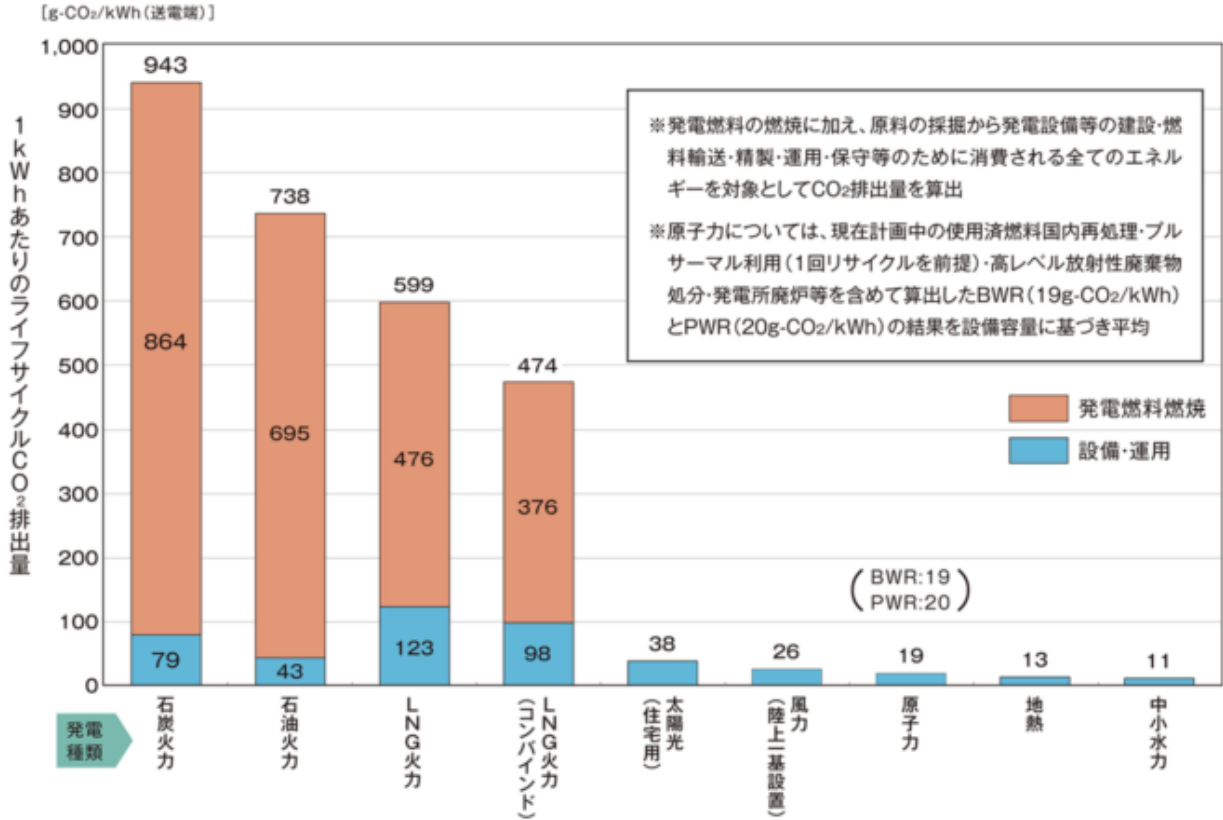
2022  
Carbon intensity, Worst Scenario



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??CO2??CO2????????????  
245????????

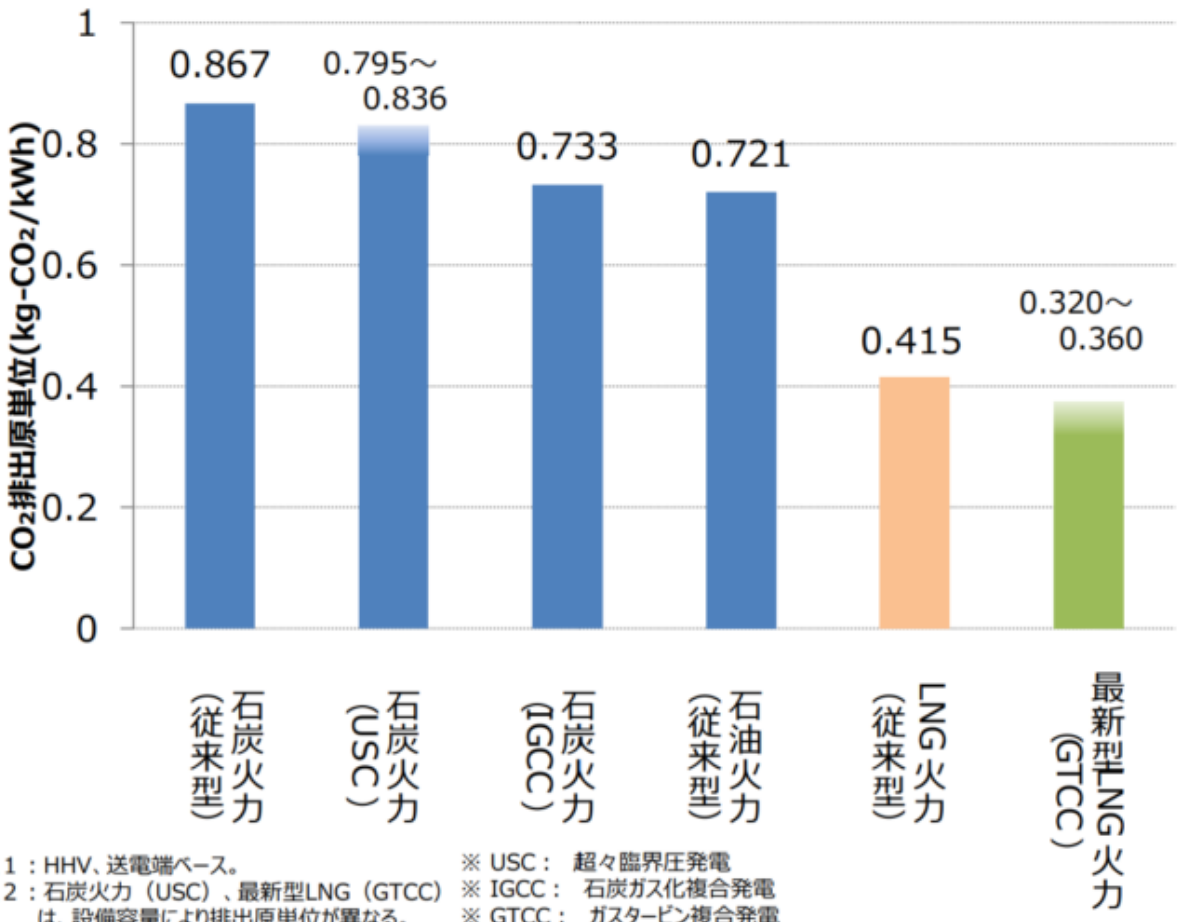
??1kWh??245??2016????????????????????????  
?????kWh??38????????????2??????????



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CO2 9

1kWh 245 CO2 2022 LNG CO2 1kWh 320 360



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CO2

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Posted in ???, ????? | No Comments »

### ??????EV????????????????

?? ?? · Friday, July 21st, 2023

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EV??



jetcityimage/iStock

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??EV??  
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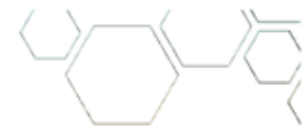
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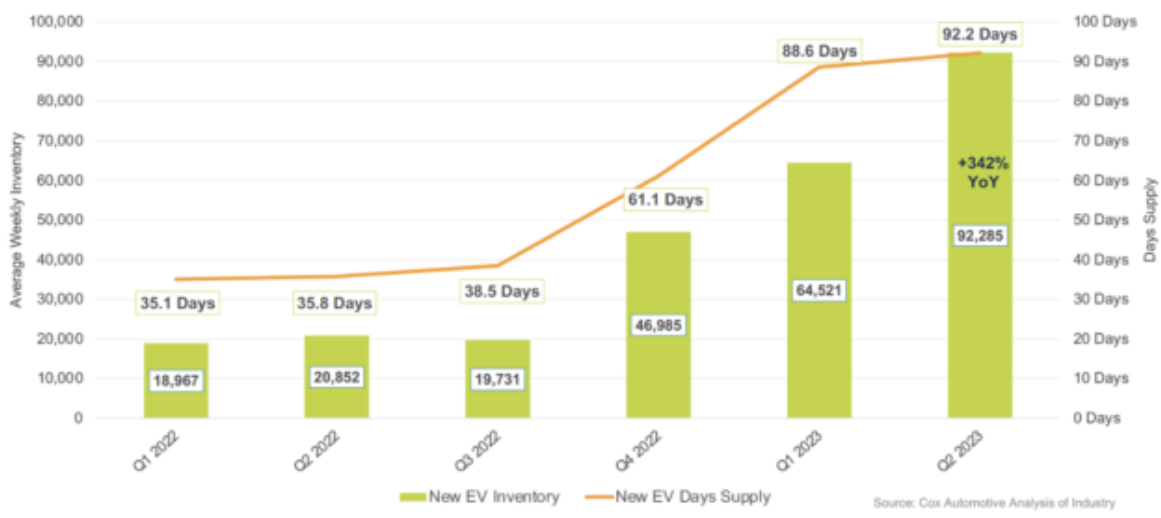
?????????????????????ESG????????????????????????????????



### NEW EV INVENTORY & DAYS' SUPPLY ESTIMATES



EV inventory is having a "Field of Dreams" moment – and days' supply follows



COX AUTOMOTIVE



#### EV?????????????????

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?????EPA????????????????????????

Posted in ???, ?????, ?? | [No Comments](#) »

#### ?????????????????????????????????????

?? ? · Thursday, July 20th, 2023

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NickS/iStock

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**Nobel Physics Laureate 2022 Slams ‘Climate Emergency’ Narrative as “Dangerous Corruption of Science”**

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Posted in ???, ????? | No Comments »

### ????????????????????????????????

?? ?? · Wednesday, July 19th, 2023



Max Lirnyk/iStock

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[Electric Vehicles for Everyone? The Impossible Dream](#)??

????????????????????BEV??ICE??BEV????????  
????????????ICE????????????HEV??

EV??I  
 CE????EV????????????????????????????????

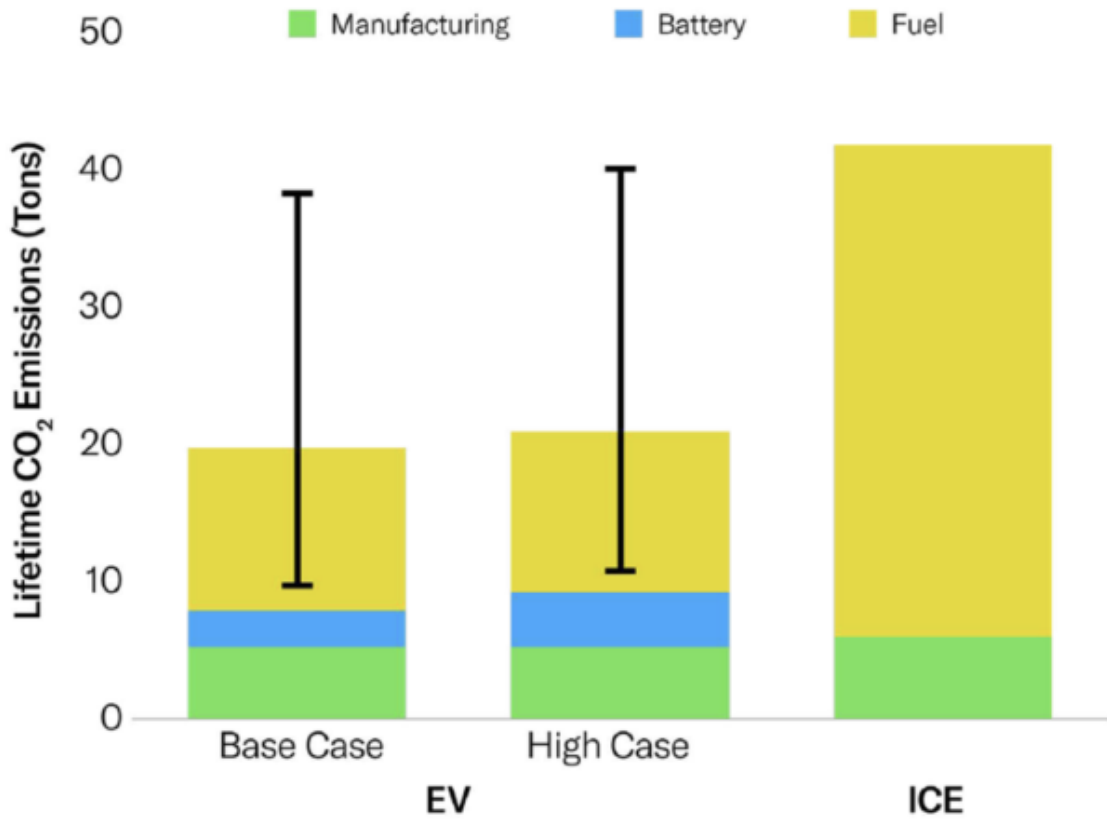
?????2??????CO2????????EV????CO2????????????????????

??1?CO2

??BEV????ICE????????????CO2????????????????

Figure 3

Estimated Life-Cycle Emissions for EVs vs. ICE Cars, per IEA



Source: IEA, "The Role of Critical Minerals in Clean Energy Transitions"

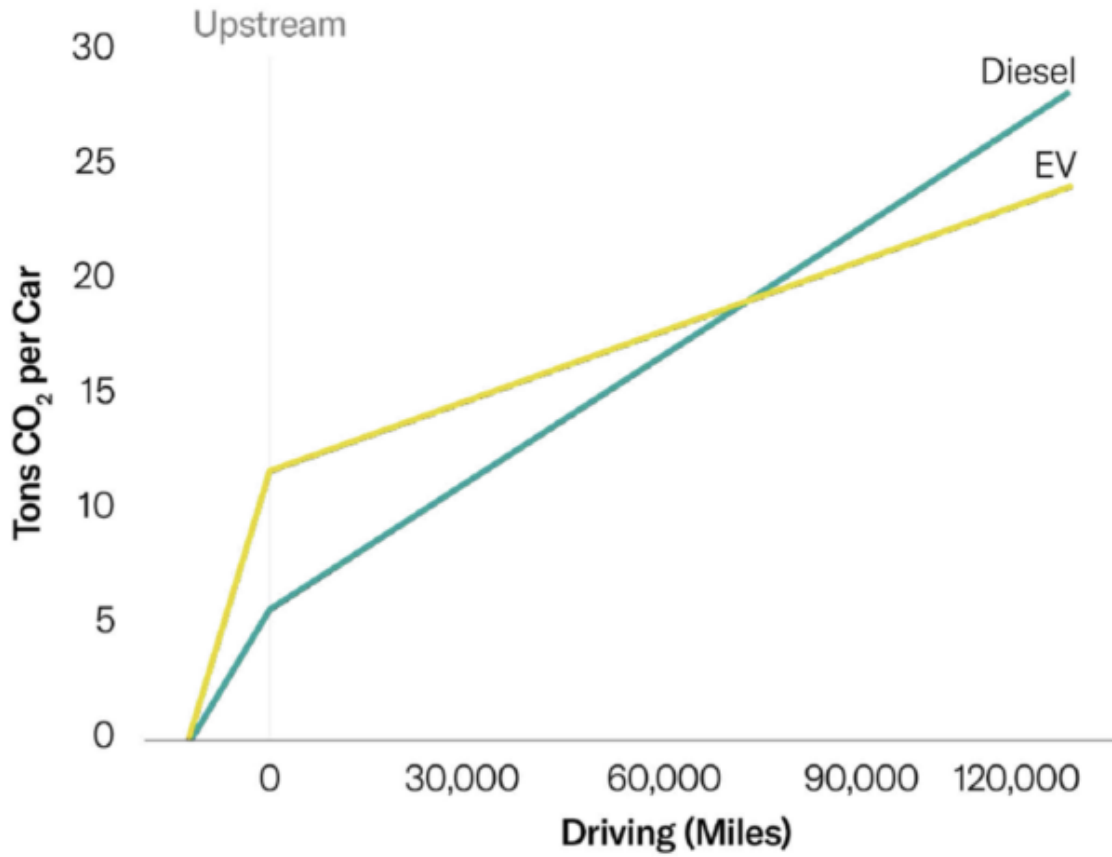
??

????IEA??  
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????????ICE?EV????????CO2????????????6????????????????????????EV????CO2????????????????  
???EV????????????

Figure 4

### Life-Cycle Emissions: Volkswagen EV vs. Diesel



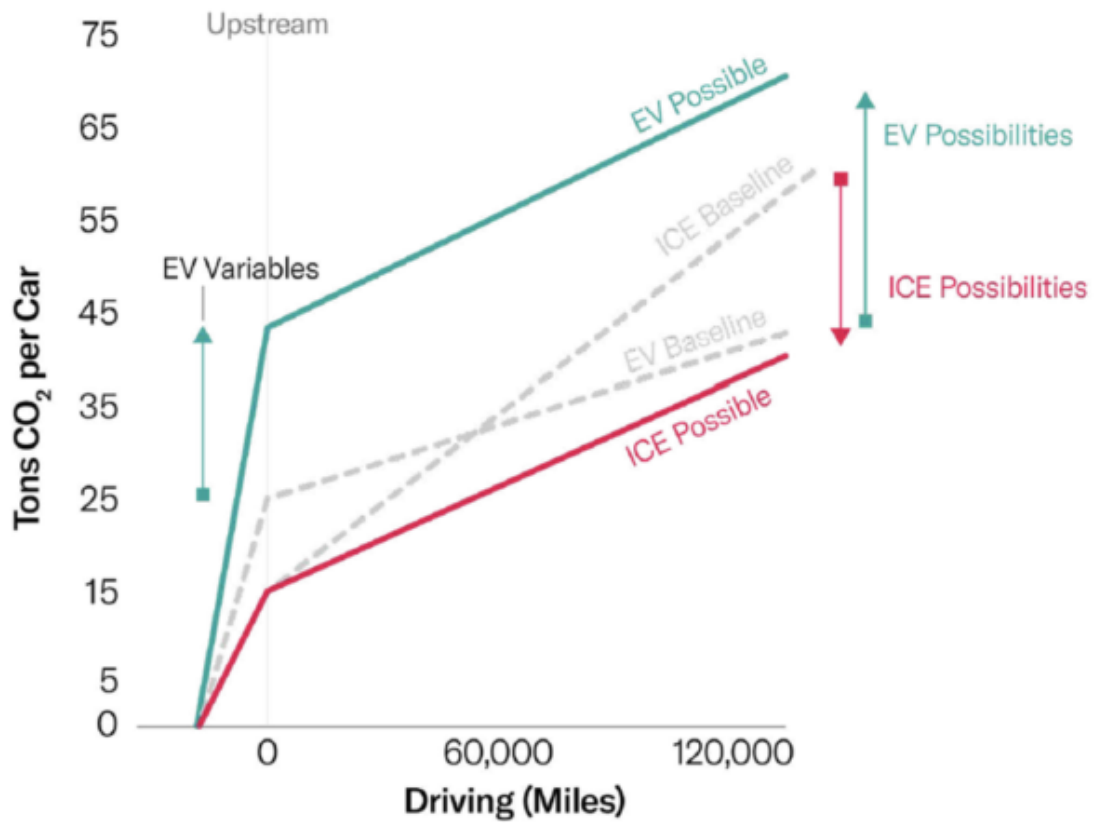
Source: Maciej Neugebauer, Adam Żebrowski, and Ogulcan Esmer, "Cumulative Emissions of CO<sub>2</sub> for Electric and Combustion Cars: A Case Study on Specific Models," *Energies*, Apr. 6, 2022

????????????????EV????????????????EV????CO2????????????????????????????????ICE????????????  
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????????????????EV????????CO2????????????ICE????????????????????????????????????12????????  
?EV???ICE???CO2????????????????????????????????

Figure 6

EV vs. ICE CO<sub>2</sub> Emissions: Scenarios with Known Unknowns



Source: Author's calculations from multiple data sources in this report; see Appendix

??????

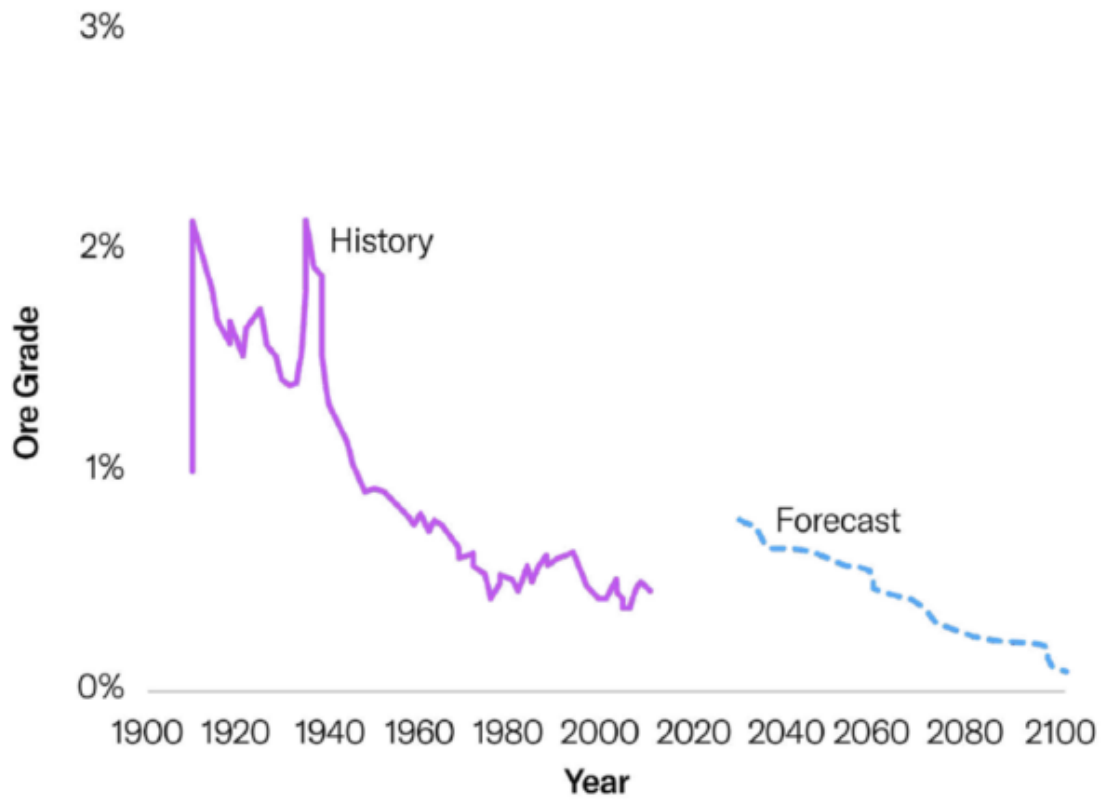
CO<sub>2</sub>?????????1????????????????? EV??ICE????????????????????????????????????

??1?????????????????????EV??

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**Figure 8**

**Two Centuries of Global Copper Ore Grades**



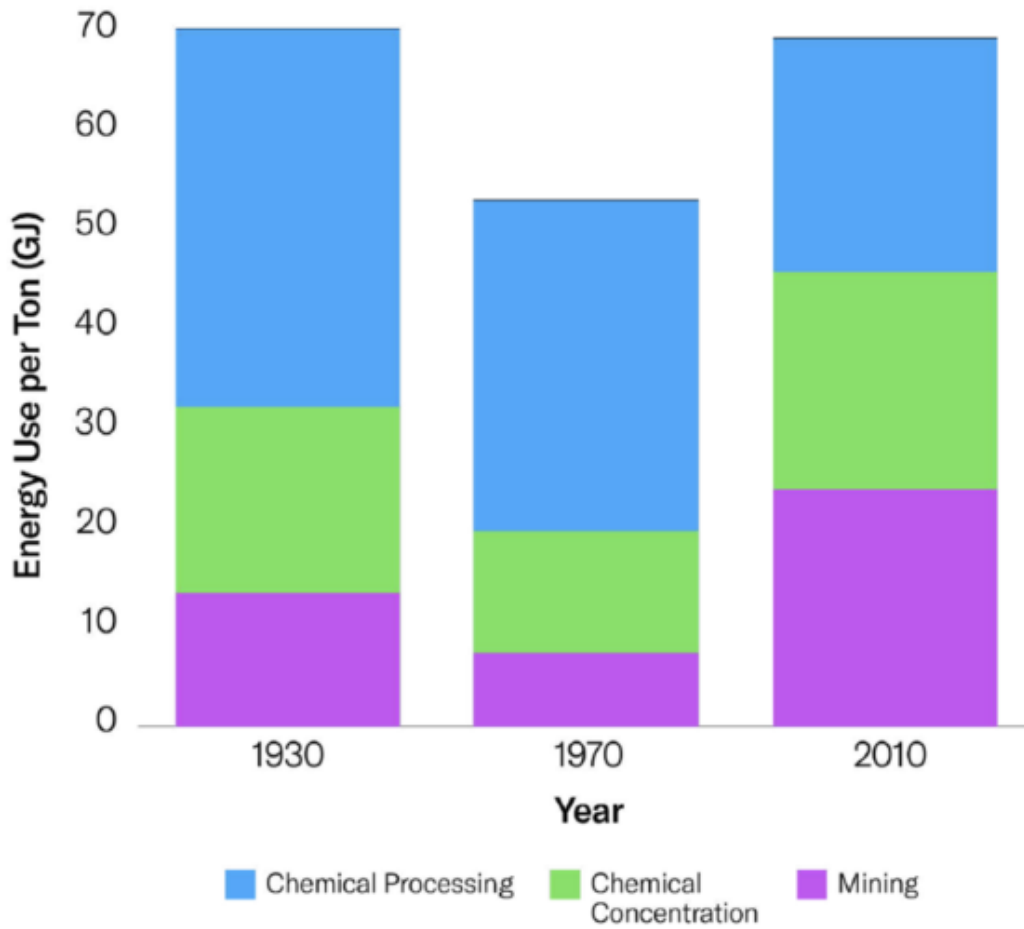
Source: S. Northey et al., “Modelling Future Copper Ore Grade Decline Based on a Detailed Assessment of Copper Resources and Mining,” *Resources, Conservation and Recycling* 83 (February 2014): 190–201

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????????????????mining????????????chemical  
concentration??BEV????  
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Figure 10

### Copper Production: Technology Trends in Energy Use per Ton



Source: Nadine Rötzer and Mario Schmidt, "Historical, Current, and Future Energy Demand from Global Copper Production and Its Impact on Climate Change," *Resources* 9, no. 4 (April 2020)

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??ICE?HEV????????????????????  
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ICE??  
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Posted in ??????????, ??, ????? | No Comments »

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?? ?? · Sunday, July 16th, 2023



Douglas Rissing/iStock

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7?11???Blackout-News??

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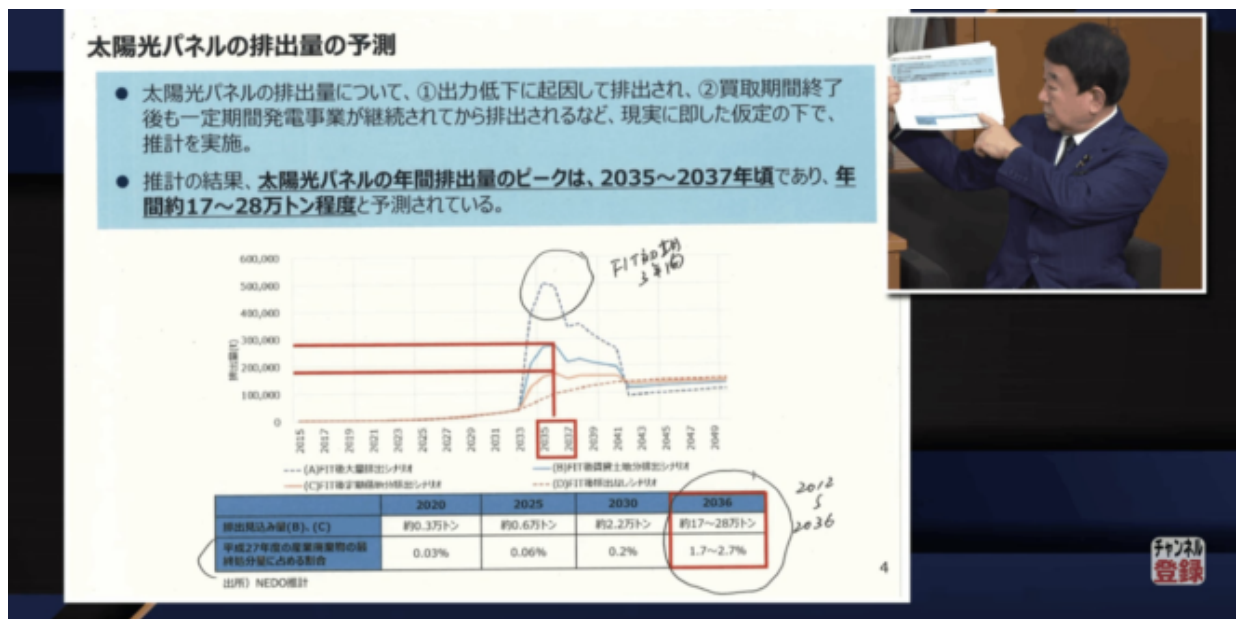
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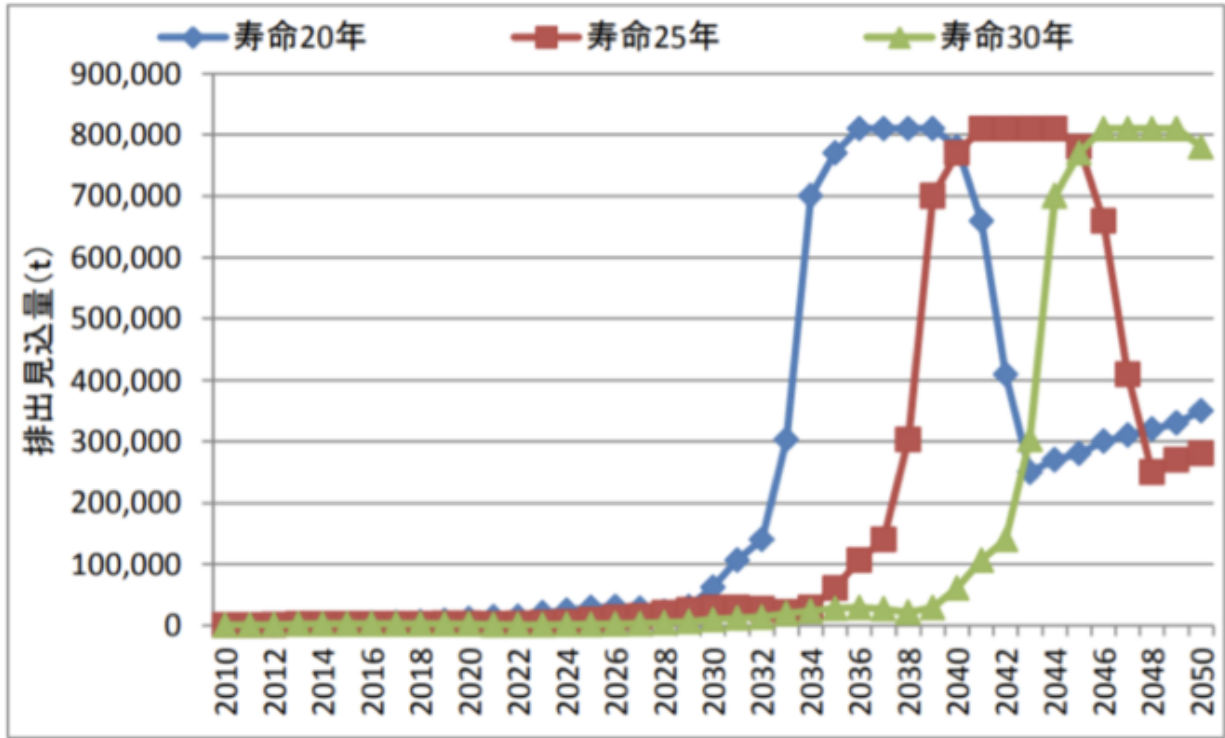
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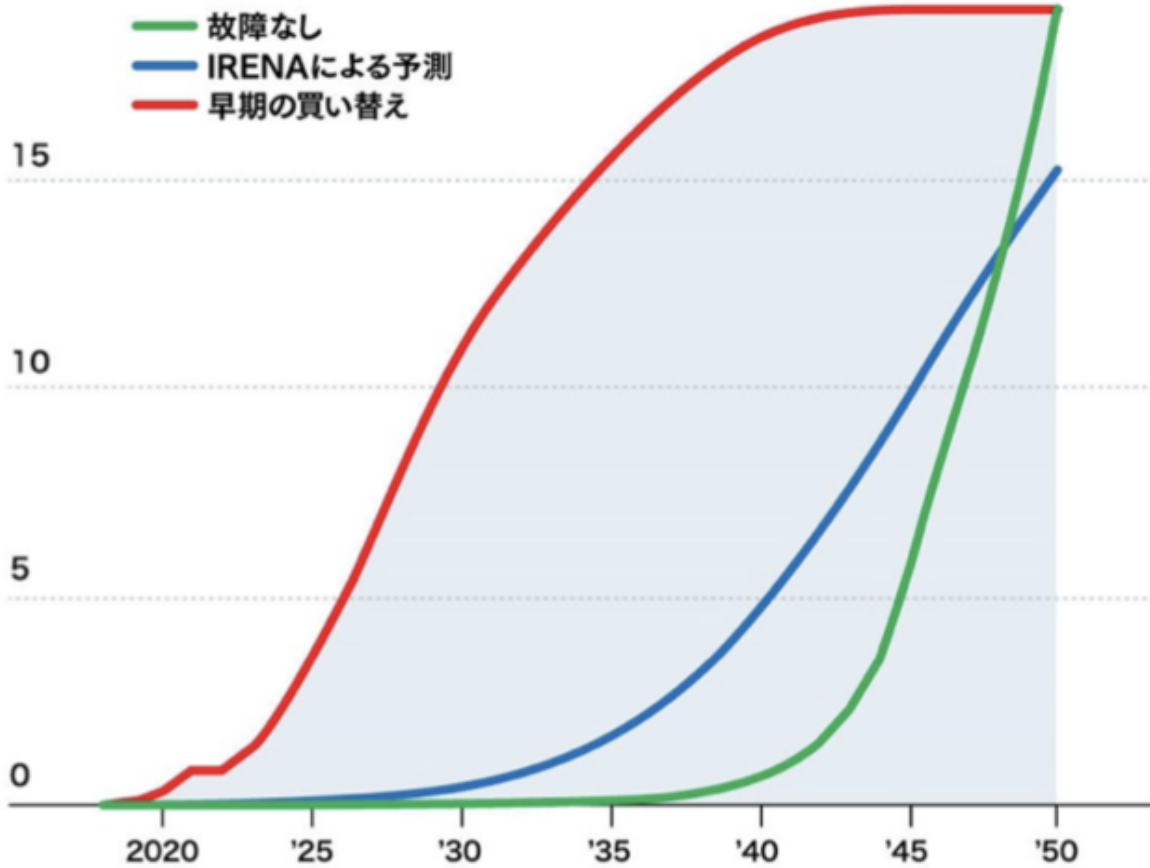




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廃棄物の累計  
 (発電容量ベース)

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Posted in ???, ?? | No Comments »

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?? ?? · Thursday, July 6th, 2023



Pixelci/iStock

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Posted in ??????????, ??? | [No Comments »](#)

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?? ?? · Tuesday, July 4th, 2023





xijian/iStock

??IEA????????????Net Zero Scenario, NZE????????????

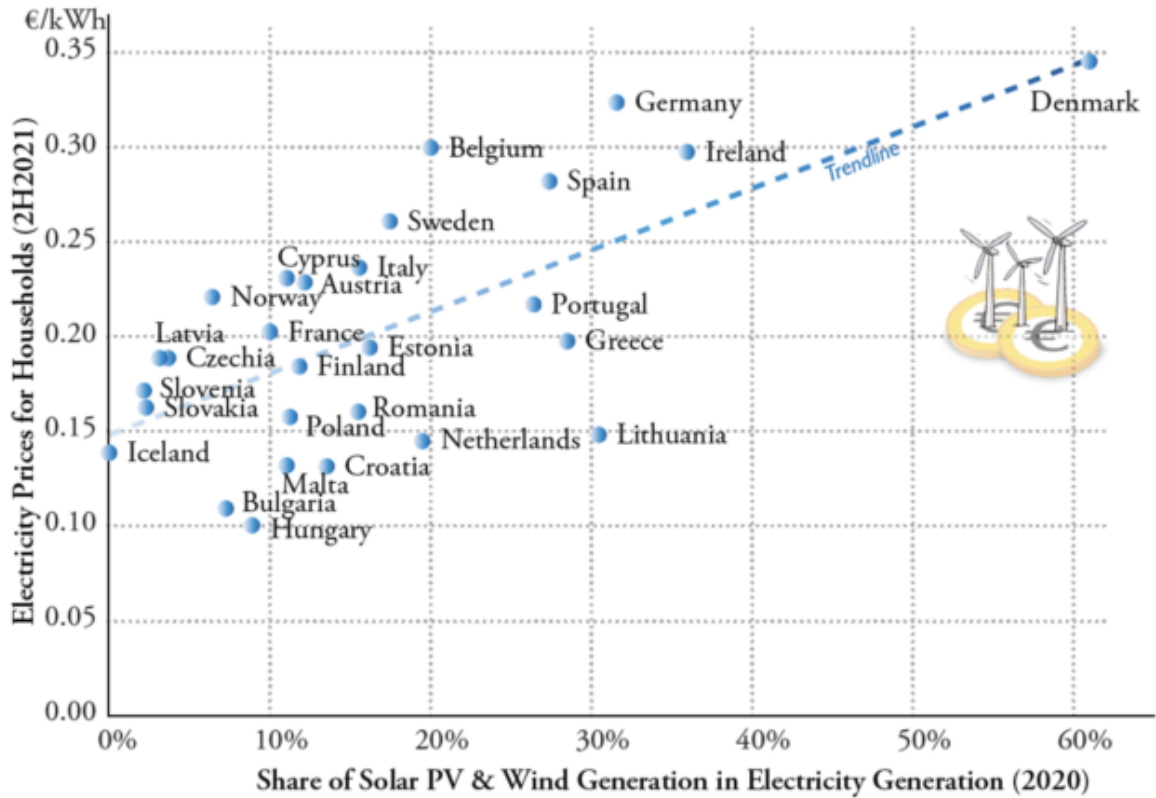
**A Critical Assessment of the IEA’s Net Zero Scenario, ESG, and the Cessation of Investment in New Oil and Gas Fields.**

??PV??  
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Figure 46: Solar and Wind Penetration and Electricity Prices in Europe

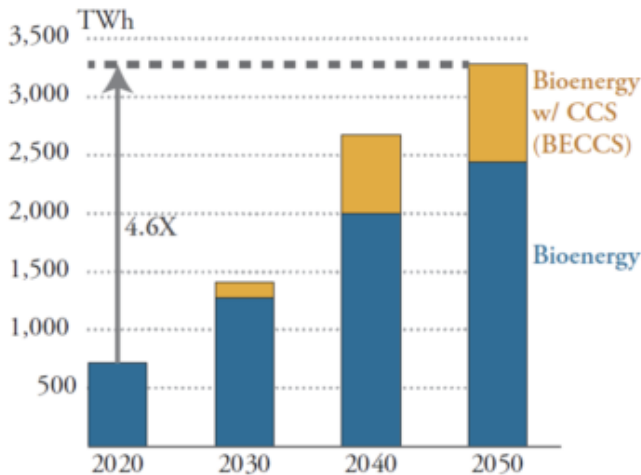


Source: Energy Policy Research, Eurostat, IEA

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IEA?NZE??2050??  
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Figure 23. Bioenergy for Electricity Generation in NZE



Source: IEA, Net Zero by 2050 (2021)

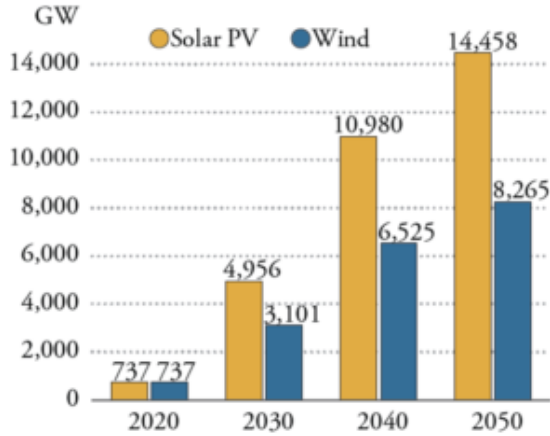
Figure 24. Global Land Requirements for Bioenergy for Electricity Generation in NZE



Source: Energy Policy Research. Land requirement calculations made using FreeingEnergy.

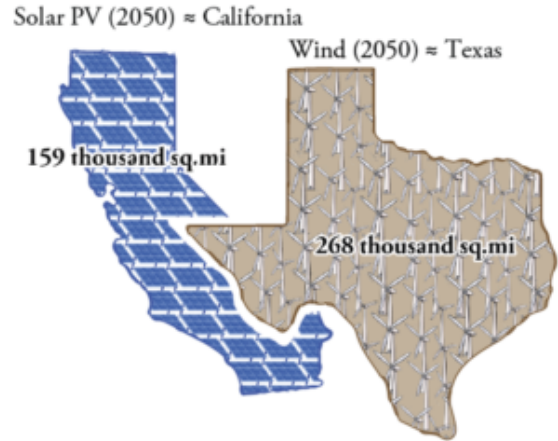
Batt Odgerel, Lucian Pugliaresi, Michael Lynch 38

Figure 25. Global Solar and Wind Capacity in NZE



Source: IEA, *Net Zero by 2050* (2021)

Figure 26. Global Land Requirements for Solar/ Wind Farms in NZE



Source: Energy Policy Research based on NZE  
Assumes sufficient/optimal grid infrastructure (transmission, storage) and current rate of efficiency

	万 km2	日本=1
メキシコ	197	5.2
フランス	55	1.5
カリフォルニア	42	1.1
テキサス	70	1.8
日本	38	1.0

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**PV???1??**  
**?????2??**  
**??????5??**

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Posted in ??????????, ???, ????? | No Comments »